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ALUMNI BULLETIN

WINTER 1989



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**PROFESSIONAL PRIDE
WEATHERING THE STORM**

Cover photo of Purcell Mountains in British Columbia by Gary Tepfer; a landscape photographer living in Eugene, Oregon. Tepfer has exhibited widely throughout the United States.

INSIDE H.M.A.B.

*"Now is the winter of our discontent
Made glorious summer by this sun of York."*

Most of us have forgotten, if indeed we ever knew, the second line of this fragment from *Richard III*. (Your editor acknowledges *his* debt to *The Oxford Book of Quotations*.) In this Winter issue we try to find our glorious summer to warm the wintry scene of malpractice, regulations, paper work and tarnished image—some positive note to dilute what has been aptly called the rhetoric of anxiety.

We have just endured an election year in which negatives have had top priority and a mordant bite. Can we look homeward and discover why we, perhaps, chose medicine as our lifework? And do this without being a Pollyanna—a term that, when you come to think of it, should doubly offend every woman in the room. That's for you to decide.

With carbohydrate loading, we can face the malaise and discontent, the dissatisfaction and concerns, that were the major subjects of discussion at the latest meeting of the Alumni Council and will almost certainly preoccupy future presidents of the council. Doris Bennett's presidential letter outlines future plans. For the present be warmed by her graceful reflections on the worthwhileness of being a doctor.

—*Gordon Scannell*

HARVARD MEDICAL ALUMNI BULLETIN

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ALUMNI COUNCIL: PRESIDENT'S REPORT

by Doris R. Bennett

At our first meeting of the 1988/89 academic year, the Alumni Council discussed issues of concern to both HMS alumni and practicing physicians throughout the country. We heard reports from various committees that were appointed during the previous year. Among these were the committee on associate alumni, the committee for alumni-student relations, the minority alumni committee, and the committee to develop a charge for the council's survey committee.

Allan Friedlich '43A, chairman of the committee on associate alumni, presented the recommendation that the

associate alumni membership be extended only to HMS faculty appointees with the rank of instructor or above. This recommendation, after due deliberation, was accepted by the council, and will be implemented by the alumni office.

The alumni-student committee, chaired by Roger Christian '66, reported on increasing communication between students and alumni. The committee worked hard over the summer to establish a foundation for networking on a local and national level between HMS students and alumni.

Another issue paramount in the

minds of the councillors was the establishment and organization of an HMS minority alumni association under the larger umbrella of the HMS Alumni Association. It was suggested that minority graduates feel the need to join together to deal with problems unique to them. This is perhaps a reflection of the national climate in which minority professionals do not yet feel that they are completely assimilated into the ranks of the majority. Our Alumni Association recognizes the situation and wishes to help with whatever means are available to us. A joint committee composed of three members of the

Thoughts of a (Reluctantly, but Gracefully) Aging Pediatrician



As time gently but insistently taps on my shoulder, I find myself thinking more and more about my life as a practicing pediatrician over the past

35 years. I am acutely aware of the repeated expressions of professional dissatisfaction voiced by many of my colleagues, my friends, and indeed, a very close relative by marriage. They are all unhappy with the restrictions placed upon them by state and federal government, with the litigious environment in which they practice medicine, and with their sense that they as professionals are gradually being devalued by the communities in which they serve.

I have wondered why I do not share this disillusionment and disaffection. Why do I still feel so good about my profession and about my own position in it?

I have always enjoyed the intellectual challenges presented by the practice of medicine. The various diagnostic puzzles, the recognition of an obscure syndrome in a confusing case, the satisfaction of seeing a patient respond miraculously to a course of therapy I have prescribed—after 35 years these all still give me a thrill. There is, of course, the other

side of the coin—the diagnostic puzzles I have not been able to solve, the obscure syndromes I have missed, the treatments that have not worked—all of these have caused me immeasurable distress and disappointment.

Perhaps the most difficult aspect of practice has been a chronic lack of confidence in my abilities. I still feel that I don't know half as much as most people think I know, and I live in constant fear that some day they will find me out. I used to feel much more anxiety early in my career, before I had successfully managed enough difficult cases.

I remember well a six-month-old baby whom I had hospitalized with "staph" pneumonia (not uncommon in babies in those days). I was so worried about this little girl, whom I visited three or four times a day, that I could not sleep or eat. Was there anything more I could do for her? What would I say to the mother if I could not save her child? These thoughts were going through my head one night as I stood beside the baby's

council, two minority alumni, and the alumni office's associate director, Nora Nercessian, are working on the organizational details of this undertaking.

The HMS director of admissions, Gerald Foster '51, reported on a nationwide downward drift in the number of medical school applications—a reduction that is also occurring at Harvard, where the total number of applicants fell from a peak of 4,000 in 1981 to 2,390 in 1988. He assured us that despite a drop in total applications, the quality of applicants to Harvard has not deteriorated.

According to Gerry Foster, the reasons for the shrinking applicant pool are varied, but two causes stand out—the very high cost of a medical education, which means most students graduate with a total indebtedness of \$60,000 to \$100,000, and the disparaging comments about medicine as a career which young people now hear from many physicians. These two factors seem to be most instrumental in discouraging medical school applications.

The malaise, discontent and dissatisfaction that seems to be afflicting doctors throughout the country was, in fact, a major subject of discussion by the Alumni Council at the fall meeting. The council agreed that many HMS

graduates, particularly those engaged primarily in clinical practice, feel that the medical school has been unresponsive to their concerns. The council also felt that the degree to which this unhappiness affects our fellow alumni is uncertain. Some of our councillors were of the opinion that the level of dissatisfaction was quite high. Others observed that this is a wonderful time to be a physician; medical science has made such tremendous strides in diagnosis and treatment of so many diseases that the ability of the practicing physician to care for patients has been greatly enhanced.

To try to determine the nature and magnitude of disaffection among our alumni, we adopted the proposal made by an ad hoc committee composed of Bernadine Healy '70, Claire Stiles '56 and John Stoeckle '47. In their report, they question, quite eloquently, "Is all this true? Or is it just the older generation decrying change? Will the new generation, not mindful of the old ways, carry on at the same level of performance that has made our medical practice and biomedical research enterprise in this country a great national treasure? Is the new generation less able or less willing to sustain the quality of the health enterprise? Can we measure this?

And if we can, can we then do anything about it?"

They go on to propose that, "a survey explore these issues, using the vehicle of a consensus conference, and an expertly crafted questionnaire directed at alumni. Perhaps the Harvard alumni group, a wide and diverse spectrum, could make a contribution—not just defining the problems and their impact, but suggesting some future action."

A committee, chaired by Paul Davis '63, was appointed to construct a one- or two-day program, sponsored by the HMS Alumni Association, to explore the various aspects of these issues. Simultaneously, this charge is being presented to our newly constituted survey committee, which will be asked to prepare, with professional assistance if necessary, a questionnaire to be distributed to our alumni. The council hoped that these two approaches to nationwide problems in the medical profession, with their consequent effect on the delivery of health care, might shed some light on issues that now generate primarily the heat of anger and disillusionment. □

Doris R. Bennett '49 is chief of pediatrics in the Kenmore Center of the Harvard Community Health Plan.

crib in the hospital room, gazing anxiously down at her. My worries must have been quite obvious, because a young student nurse who did not know me came over, put her arm around my shoulder, and whispered, "Don't worry, mother, your baby will get well. She has a good doctor." I remember thinking as I walked away, "If only that were true."

Being a doctor—a pediatrician—has often been difficult, primarily because of feeling entrusted with parents' most precious possession, the lives and well being of their children. This is an awesome obligation, to be sure, but to assume this responsibility and do it well is, indeed, the essence of being a pediatrician.

There have been many gratifying moments. I have made no earth-shaking discoveries; I have done nothing to advance the field of medicine; I have done very little dramatic life-saving; but I feel I have made some difference in a few people's lives—children and their parents. It is only in recent years, with

more perspective, that I have begun to realize that actions I take for granted as a routine part of my job can actually be a turning point in a patient's life.

Recently, a 16-year-old who has been my patient since she was born came in for a check-up and her first vaginal examination. I performed the examination thoroughly, but gently and tenderly. Afterwards, we talked in a woman-to-woman fashion about sex, the pros and cons, the need for protection, the kinds of protection, the dangers of sexually transmitted disease—my usual teenage routine. We finished, she said goodbye, and I had just started reading the patient's record, when there was a knock on my door. There stood the teenage patient, "Dr. Bennett," she said. "I forgot something." She then gave me a big kiss, whispered "thank you," and left.

When I had a chance to think about this encounter, I was struck by the realization that what I had regarded as a routine examination

and counseling session was actually a milestone in the life of this young woman. I had indeed made a difference. How many careers are available to men and women today that offer a chance almost every day to do something significant, to have such an impact on people's lives? It can be a powerful ego trip, and often is, or it can evoke humility if you contemplate the responsibility it entails.

These are some of my thoughts about having been a doctor for so many years. Whenever I am asked if I would do it again, I say, "Yes indeed, in a minute." I recommend it to young people who want to feel they are doing something worthwhile, who want a career of which they can be proud.

These are personal thoughts, and do not, as far as I know, reflect the feelings of my colleagues. But I sincerely hope there are some doctors out there who, when they look inside themselves at their own lives, will find that they agree with me. □

—Doris R. Bennett '49

LETTERS

Amusements and Accolades

I found the Summer *Bulletin* most interesting, as usual. You might be amused by my reaction to the photograph of Leonard Wood and his wife on page 54. It required about a triple-take to decide that your editors had not chosen the wrong picture for that page. I thought, at first, that you had accidentally printed a picture of Joseph Stalin!

—Charles C. Colby III
Associate Librarian for Boston
Medical Library Services.



Joseph Stalin



Leonard Wood

I write to commend you on your Summer *Bulletin*—it is truly superb. I have never questioned the creativity of doctors, but you have produced proof. The contents of this issue have prompted me to make contact with Curt Prout (re: the alarming trends in internship choices) and Mark Altschule (re: the decline of research in whole patients). Praises also for keeping up attention to the Undergraduate Assembly, in the founding of which, by Gephart and others, I was honored to be included back in 1940. Keep up the good work.

—Peter Ahrens '41

You keep getting better. I guess we all try to keep getting better—better looking, better sense, better dreams, better performances. Judging by your Summer issue, I think you are succeeding. It was beautiful and interesting. Take Lewis Thomas—anything he writes anywhere is interesting. I know him, and I liked his memo about punctuation. And dear friend Mark Altschule! His is a stimulating article. And the article about Hans Zinsser is *beautiful*. (Unfortunately, I never knew him, but I read the whole book years ago.) I also read some of the alumni notes, which always give me pause. Nothing from the Classes of 1925, '24, '23, '22, '21, '20, '19, and '17! Where are the boys of those years? It makes me think I must be 100 years old or 150.

Reading your Summer issue was part of my 95th birthday celebration. Children at our Villages, Inc. (group homes for children) put wildflower seeds into little packages and attached them to 95 balloons, which were released into the sky.

—Karl Menninger '17

It is with great glee I note the account on Leonard Wood by Alfred Bollet in the Summer *Bulletin*. Seldom does a non-academic make your pages and Leonard Wood, whom some of us believe was the greatest physician/soldier ever to grace HMS, finally made it!

I must be far over the hill, but Canin's "American Beauty," seven pages? Most of the death notices of non-academics get three or four lines. I suppose Canin needs a boost on his writing career!

—John W. Kennedy '33

I very much enjoyed and appreciated the recent article "Notes on Music at Harvard Medical School" by Francis Moore in the Summer 1988 *Bulletin*. Also, the entire tone and approach of this particular issue was very welcome to me, since artistic activities have been perhaps the most important aspect of my work in life, the only exception being during the principal clinical year at HMS.

I wanted to add some information to that provided in Dr. Moore's wonderful article. I was pleased to read of the formation of the Harvard Medical School Music Society in 1974. However, during the turbulent '60s there was also substantial musical activity centered around Vanderbilt Hall and the Longwood medical community, although we did not give ourselves any particular name, nor found any lasting organization. The Harvard Medical Chorus, directed by Emily Romney, performed from time to time during that period. If only for historical reasons, it would be valuable to document that activity, which had a wide base of participation.

On the instrumental side, an extensive series of chamber music and musical theater performances were presented by HMS students between 1964 and 1968. Participants in these programs included George Goldberg on violin and viola, Vince Reale on violin, Wayne Gradman on piano, Ronald Goldenson on horn and alphorn, several singers of whom I recall Barbara Hurwitz and Judy Levine, as well as William Moraine and myself on trumpet and alphorn. Andy Weill directed theatrical productions at HMS and in Cambridge; I wrote original scores for two of these, including the infamous

production of *King Ubu*, which features HMS students on stage and in the pit.

The duties of clinical medicine slowed us down a bit, but a large number of our contemporaries at HMS did their best to continue some relationship to the arts. I kept up my instrument, performed with the Harvard-Radcliffe Orchestra as first trumpet, and played "gigs" to ease the financial burden of student life. After completing my residency in internal medicine, I obtained a master's degree in instrumental conducting from the University of Southern California, and for the past 12 years have derived my principal income as a professional musician. I

am currently music director of the South Carolina Philharmonic Orchestra, and continue to practice medicine in Lancaster, SC.

The real purpose of this letter is not to call attention to my own activities, but merely to suggest that many physicians share my artistic impulses. Every effort should be made to humanize the medical profession and encourage a broadly creative approach to medicine and to all of life, especially at an institution such as HMS. As is often stated in our cultural fund-raising efforts here in South Carolina, the arts are not a frill, they are an essential element in our society.

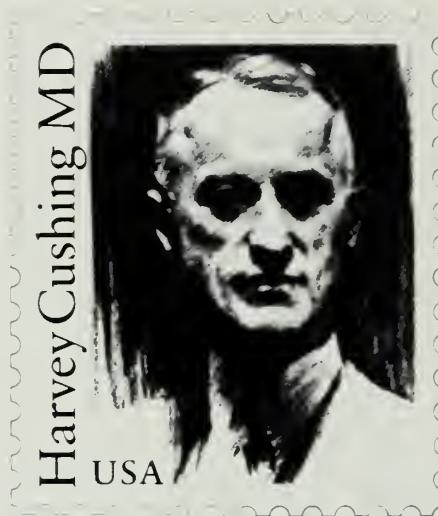
—Einar W. Anderson '68

PULSE

Stamp Commemorates Harvey Cushing

Master of surgical technique, founder of a whole new medical field, endocrinologist, teacher, investigator, bibliophile, artist and Pulitzer Prize-winning author, Harvey Cushing (Class of 1895) was, by anyone's account, a man of truly exceptional prowess. This year the U.S. Postal Service adds another to this long list of honors by commemorating Cushing's achievements on a new 45-cent stamp. To mark the occasion, a celebratory program sponsored by the neurosurgical departments at BWH and Children's Hospital, was held in the auditorium of Brigham and Women's Hospital in September.

Sarah E. Howard, field director of marketing and communications for the Boston Post Office told the distinguished audience that Cushing's image was chosen from among the more than 2,000 suggestions the Postal Service receives for new stamps each year. The long list of distinguished speakers at the event included, among others, Peter McL. Black, chief of the division of neurosurgery at BWH and Franc D. Ingraham Professor of Neurosurgery at



HMS; H. Richard Nesson, president of BWH; Nicholas L. Tilney, director of the surgical research laboratories at HMS; and Gustave J. Dammin, former pathologist-in-chief at BWH.

Cushing, whom Black described as "the man who put neurosurgery on the map," came to HMS as a student in 1891, and returned during the height of his career in 1912 to serve as HMS

Moseley Professor and surgeon-in-chief at the Peter Bent Brigham Hospital. By 1917 he had established himself as the leading American surgeon of his time.

"His case load was large, his success rate high," said Tilney. "To his pupils, he was compulsive, difficult, often arrogant. Every facet of surgery and patient management had to be perfect. His concern with technical artistry caused him repeatedly to innovate and refine existing methods and tools of surgery to handle better the friable and vascular tissues of the brain."

An enlarged version of the blue pencil portrait of Cushing that now graces the new stamp was propped against an easel at the front of the auditorium. It revealed something of the thin, intense and hard-driving character that will now make its way, at least in a small way, into many American homes. □

Class Admissions

Fifty-six colleges in 30 states and six different countries, including Canada, Iran, Italy, Japan and the West Indies, have contributed to the Class of 1992. Among the students enrolling this year is one sponsored by Philips Brooks House to teach in Kenya, and an athlete who, along with his father, formed the second team to ever complete the Iron Man Triathlon.

Fifty-nine percent of these high achievers attained undergraduate grade point averages of 3.75 or better, up from last year's 46 percent. Harvard/Radcliffe predictably had the largest number of enrollees, 40, while Yale had 13 and Princeton University had 9. The Class of 1992 includes 18 black Americans, 3 Mexican Americans, and 3 Puerto Ricans; ages range from 20 to 32.

Director of Admissions Gerald S. Foster '51 remarked upon the growing number of scholars to join HMS. Among the 24 students who deferred enrollment this year are two Rhodes and one Marshall scholar, while there are three Rhodes scholars and one Marshall scholar among the previously deferred students enrolling this year. Foster is particularly gratified by the deferment program, since it provides the students an opportunity to participate in personally and intellectually rewarding activities before starting medical school.

The nationwide decline in medical school applicants is reflected also in Harvard's applicant pool. The 106 men and 60 women entering the Class of 1992 were chosen from an applicant pool of 2,390 students, 245 fewer appli-



First-year students get acquainted during orientation.



HMS To Establish Venture Capital Fund

In a new, carefully planned collaboration with the private sector, HMS is establishing an independent fund raised from a small group of investors to support faculty research and its commercial development into medically useful products and processes.

"This new fund addresses what we recognize as a gap in the research funding process," says Dean Daniel Tosteson. Approximately two-thirds of the money needed to support HMS research comes from the federal government, and corporations and foundations provide half of the rest of the money. "But some research is too applied for the NIH, and yet is not far enough along for a corporation to fund." The venture capital fund will finance such commercially promising, early-stage discoveries in

cants than last year. However, at HMS "the academic records of the applicants are as strong as in the past," emphasizes Foster. The high grade point averages of the Class of 1992 are just one indication of this. The 70 students who did decline HMS did so mostly for financial reasons, thus indicating, says Foster, the need for more loans and scholarships.

Although the decline in applicants had been partially fueled by discouraging comments by some physicians, Foster says that "the blending of science and humanism still makes medicine as exciting a career as ever." □

order to hasten their development.

According to Dean Tosteson, a fund of \$30 million is being generated from six or eight investors, who will be limited partners in Medical Science Partners, L.P. (MSP). HMS initiated the fund proposal, which is carefully designed to preserve Harvard University's academic principles, while keeping the fund management at arm's length from the medical school. Harvard will not invest any money, nor have control over investment decisions made by the fund. But Harvard will receive 10 percent of any income from the fund's investments through a non-profit subsidiary of the university called Ion, Incorporated. Income will be channeled through Ion, Incorporated to HMS to support basic research.

Andre L. Lamotte—a former executive with an American affiliate of the French drug company Institut Merieux—will be named the managing general partner of MSP. He was identified by the HMS committee responsible for initiating the fund proposal and will be hired by Ion, Incorporated. It is Lamotte who will have sole authority to decide for MSP where and how investments will be allocated; the fund structure stipulates that 85 percent must be invested in projects directed by members of the Faculty of Medicine at HMS and the affiliated hospitals. Ion, Incorporated will oversee Lamotte's activities to ensure that they don't conflict with Harvard's research policies.

Details of the funding plan have been hammered out over the past four years in accordance with university policies to safeguard academic integrity and independence. Faculty must ensure, for example, that no more than 20 percent of their professional time is devoted to outside work such as consulting. No secrecy or restraint of publication is allowed.

"In addition, the venture fund plan includes establishment of an HMS academic review committee to review every funding proposal for scientific excellence and adherence to existing research policies," says Stephen Atkinson, director of the HMS office of technology licensing and industry-sponsored research.

Many other major universities are already involved in some sort of commercial alliance. "Harvard's participation in the creation of this business venture is a first for us," says Atkinson. "And the time and care that went into it reflects the institution's concern that the quality and character of basic research is not compromised in any way." □

CAMPAGN REPORT

Alumni Phonathon

The HMS fundraising phonathon last spring proved worthwhile for all involved. The school made money (about \$100,000), alumni "participation" increased, and the students who did the calling had a great time.

Although the object of the phonathon was to remind alumni to contribute to the annual fund, many alumni and students compared notes on various professors or courses and exchanged questions and answers. Some conversations lasted a half-hour.

"I really enjoyed doing the phonathon," says Christina LaMonica '91, one of 22 student-callers. "I was able to find out what others have done with their Harvard education, and it was not just academic medicine." She talked to alumni who worked in drug firms, private practice, and one who is in law school part time. "A lot of them reminded me that I didn't have to follow a set course."

Many alumni the students spoke with were curious about the new pathway and other changes in education at the school. "Some were glad about the changes," says LaMonica. "They said the old process was inhuman and tedious. Others didn't want to hear about changes, because they felt that negated what they had gone through. I got different perspectives."

There were a few hang-ups, but 57 percent of all who were called on the 12 nights over a three-week period did in fact pledge a donation. And what particularly pleases the fundraising staff who organized this event is that overall participation in the annual fund drive was 55 percent this year, up from 49 percent the prior two years. There were 467 additional donors, and some gave who never had before.

"Even more important than amounts raised," says Dorothy Newell, director of annual giving, "is to have as many alumni as possible involved in what we're doing."

It was up to class agents to decide if

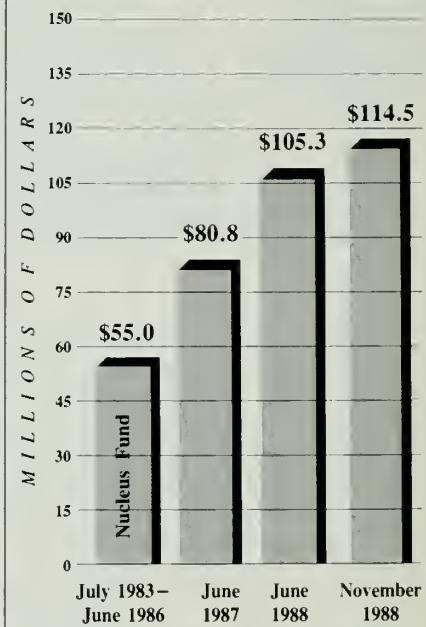
they wanted their class members contacted in the phonathon. In those classes that were called, the percentage increase in participation from the previous year ranged up to a dramatic 125 percent in the Class of '81. Participation in classes between 1950 and '80 that were involved in the phonathon rose 2 to 65 percent this year.

This was the first phonathon HMS ever conducted, but won't be the last. "The results are proof that a phonathon is an effective means of increasing participation and communication," says Newell. As for the students, some have already expressed interest in doing the phonathon again next year. □



Student callers one night were (l to r): Meg Chaplin, Laugham Gleason, Christina LaMonica, Sharon Underberg-Davis, Rebecca Leong, Lori Olans, Caren Soloman and Elizabeth Waterhouse.

Campaign for the Third Century of Harvard Medicine



The Campaign reached \$114.5 million in gifts and commitments as of November, 1988. The Campaign goal is \$185 million.

BOOK MARKS

Dream Revisitation

THE DREAMING BRAIN,
by J. Allan Hobson,
Basic Books, Inc., New York, 1988.

by Gary Richardson

*"I have had a dream, past the wit
of man to say what dream it was."*
William Shakespeare, *A Midsummer
Night's Dream*

Human fascination with dreams and dreaming dates from earliest history. Across the ages, the strange and wonderfully alluring dream image, hanging just out of conscious reach, has infused and informed mythology, mysticism, literature and art. Finally (and somewhat fitfully) dreaming has spawned its own science. Since the discovery in the 1950s of REM (rapid eye movement) sleep—the recurrent nocturnal alteration of existence during which dreaming takes place—the study of sleep physiology and pathophysiology has exploded. Detailing the physiologic and neurophysiologic concomitants of REM sleep has kept the budding science frenetically occupied for the subsequent 30 years.

Amid all this effort, however, relatively few physiologists have acknowledged Shakespeare's daunting challenge and taken up the study of the dream itself. Much of the scientific effort has thus only indirectly addressed the important questions about dreaming. How is the dream generated? From what source does the often bizarre imagery arise? What does dreaming teach us about the waking function of the brain? What compelling overall function does dreaming serve, to justify its consistent expression across all of mammalian phylogeny?

J. Allan Hobson '59 is perhaps the world's preeminent dream physiologist. More than any other researcher in the field, he has focused his scientific efforts on the study of the phenomenon of dreaming. His remarkable book *The Dreaming Brain* includes a compelling and imminently readable history of

sleep and dream research, and an impressive summary of his own contributions during 15 years of work in the field. The book concludes with a convincing presentation of the author's own hypothesis, both comprehensive and accessible, that currently frames most scientific work in the field.

Hobson begins with an historical summary of the scientific study of dreams. In the early 19th century, scientific medicine was encircled by the pervasive philosophy of vitalism, the idea that mechanisms of life were fundamentally inaccessible to analytic science. Most hampered by this concept was the fledgling field of neuroscience, where the massive complexity of the mind seemed proof of the vitalist position.

Hobson traces the slow early progress of neuroscientific empiricism away from vitalism and toward the "brain-mind," the hyphenic merging of the functions of the mind with physiologic mechanisms of the brain. Early progress was based almost entirely on contemplative reasoning rather than experiment, and in this setting dreaming was regarded as a useful "experiment of nature," against which models of waking brain function could be contrasted and checked. Many early neuroscientists speculated extensively on the nature of dreams and Hobson recounts a remarkable series of insights that presage much of his own model.

Hermann von Helmholtz, a co-signer of the "pact against vitalism" in 1845, hypothesized that dream imagery was dictated by dream movement. Thus, dreaming of stepping into a boat produces the internal dream image of the surrounding lake. This idea, now buffered by extensive neurophysiologic data, forms a cornerstone of Hobson's "activation-synthesis hypothesis."

The fascination with dreams in the pre-Freudian era of dream research also produced a series of "dream naturalists" who relied upon recollected dream imagery to develop models of the dream-

ing process. Certainly the most prolific of these was the encyclopedic M.J.L. Hervey de Saint-Denis, who systematically recorded his own dreams and his hypotheses as to their origins for five years, filling 22 volumes. Hervey hypothesized that dreams were sequential presentations of stored memory, "*cliches souvenirs*." He was also the first to attempt experimental manipulation of his dreams to test his hypothesis that dream content could be modified by external stimuli or external suggestion.

Hobson traces the fascinating origins of Sigmund Freud's psychoanalytic theory of dreams. Freud's dream theory, rather than deriving from any systematic study of dreams themselves, analogous to that of Hervey, derived indirectly from his early attempts to model the nervous system. Apparently frustrated with the inadequacy of the then current understanding of neurophysiology, Freud abandoned his *Project for a Scientific Psychology* and moved instead to the more speculative work that gave rise to *The Interpretation of Dreams*.

Nonetheless, as Hobson systematically demonstrates, there is a remark-

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able correspondence between Freud's early hypothesis about the function of the nervous system and the tenets of his psychoanalytic theory. Hobson describes an egotistical, "quasi-heroic" and cynical Freud who sought to distance his dream theory from its early, crude origins, and in so doing protected it from objective scientific evaluation. Hobson suggests that Freud deliberately sequestered psychoanalytic theory on a plane that neuroscience could not yet reach and then, using his prestige to quiet dissenters, pulled the ladder up after him.

Floating freely, based only on its own axiomatic constructions of hypothetical psychological forces, the psychoanalytic theory dominated early 20th century thinking, safely immunized from critical evaluation. Whether because of this early unopposed momentum or, as Hobson suggests, the appealing literary quality of psychoanalytic theory, the Freudian view of dreams as complex symbolic expressions of hidden desires persists in popular perception to this day. Hobson's reasoned and thorough critique, coupled to his own biologic model of dreaming, may finally serve to displace the fiction.

The turning point in the objective study of dreaming came in 1953 when Aserinsky and Kleitman, using the electroencephalogram and the electro-oculogram to study brain electrical activity and eye movements during attention, noted episodic bursts of rapid eye movements during sleep. The "prepared minds" of Aserinsky and Kleitman realized that these episodes might represent the overt manifestation of dreaming. Simply waking the subjects during the episode quickly confirmed the hypothesis. William Dement, working in the same laboratory, established that a similar state occurs in cats, a finding that simultaneously provided neuroscientists with an accessible model of REM sleep and dealt the psychoanalytic model its first severe blow. (When a cat dreams of a cigar, is it really a cigar?) With these two contributions, the modern era of sleep research was launched.

Fueled by rapid progress in neurophysiologic methodology, the study of basic sleep mechanisms has made enormous strides over the last 25 years. Among the most important contributions are those of Hobson and his co-worker Robert McCarley, who together recorded electrical activity from single neurons in the brainstem and identified populations of "REM-on" and "REM-off" cells. Detailed study revealed cyclic patterns of reciprocal interaction in the firing rates of the two populations that

anticipated the recurrent onset of REM sleep episodes. While controversy continues over the exact role of these cell populations, there is little doubt about their fundamental involvement in the phenomenon of REM sleep.

From this firm foundation in physiology, Hobson presents his "activation-synthesis" theory of dreaming in the last section of the book. According to this appealing model, dream imagery arises in response to primary brain stem stimulation of rapid eye movements. These eye movements are "interpreted" by higher brain centers using appropriate images stored in memory—a theory reminiscent of that of Hermann von Helmholtz. The dream is then "synthesized" as associative centers attempt to collate the randomly generated images into a cohesive, if often bizarre, dream "story."

Several known features of dreams are nicely explained by the activation-synthesis model. The overwhelming visual nature of dreams corresponds to the primary role of eye movements and the activation of the visual thalamus and optic cortex. Less prominent roles for other sensory modalities in dreams

presumably reflect their relative quiescence during REM sleep (though the commonly reported dream sensation of flying or falling may stem from the demonstrated direct activation of the vestibular system). Bizarreness arises from the juxtaposition of randomly retrieved and unrelated visual images. This "bottom-up" approach linking physiology and dream content is the most powerful feature of Hobson's "activation-synthesis" model, in that, in striking contrast to earlier models of dreaming, it provides clear predictions amenable to experimental validation.

In the end, the hardest question remains: what purpose does dreaming serve? We have only recently demonstrated that sleep is vital to life. This seemingly intuitive observation was remarkably difficult to prove. Deciphering the role of REM sleep promises to be an even more difficult problem. □

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COMMENTARY

What the World Needs Now is a Primary Care Internist

by Michael T. Myers

After bantering over the latest capers of Michael Dukakis or George Bush, the next favorite topic of discussion last fall among Massachusetts physicians was how bad things had gotten in the Commonwealth. Granted, the practice of medicine is no longer the nirvana it once was: Escalating malpractice premiums, capitation, and limitations imposed by state lawmakers and insurance companies have all done their part to sour what was once a pleasant experience here.

The most disgruntled, and therefore most vocal, physicians have been the obstetrician/gynecologists and the sur-

geons. Hordes of ob/gyns have left Massachusetts, some have limited their practices to just gynecology, while others have been (more or less) forced to become employees of health maintenance organizations, which will pick up the tab on their enormous malpractice premiums. This is becoming a serious problem for those of us in private practice who wish to refer our female patients for gynecologic care—there simply are no doctors out there for the job.

One very unfortunate consequence of such problems is that some bright, well-meaning high school and college students have excluded medicine entirely

as a career option. Some physicians (especially in the Commonwealth) couldn't blame them, and would probably encourage the wunderkinds to seek fame and fortune in business or law school.

To suggest that one pursue medicine in light of these realities must seem the height of absurdity, and to establish a solo private practice in medicine in a state as inhospitable to private practice as Massachusetts, must appear even crazier. But that is precisely what I, for one, am doing. And you know what? I'm loving every minute of it!

Sure, it's important that our work provide some significant contribution to the betterment of man (ask Oprah Winfrey), but most of us are not that noble or saintly, and we tend to choose careers based upon at least one of three desires: money, power or intellectual interest. Fortunately, in medicine all three are satisfied, and that's why doctoring, despite current sentiment, will continue to attract the best and brightest students. Putting aside the nobility of medicine, the great service physicians provide to the infirm and suffering, I like the profession because it's fun.

To speak of our profession in these terms must seem sacrilegious. How can diagnosing someone's leukemia be "fun"? Certainly I am not suggesting that we derive sadistic pleasure from the misfortunes of our patients, but that the intellectual process involved in solving the mystery of diagnosing leukemia may be seen as fun.

Each new patient I encounter is like the start of an engrossing narrative. She speaks of vague symptoms—weakness, fatigue, mild anorexia and a bit of diarrhea. On physical exam you find several lymph nodes and perhaps an enlarged spleen, and you later discover her to be pancytopenic. You can hardly wait to get the results of the bone marrow, confirming the suspicion of myelogenous leukemia you've had all along.

I guess this is the principal reason why I never became a surgeon. In surgery the mystery is solved and you already know the patient has a ruptured appendix that must be removed. The fun for surgeons is in doing the surgery—the precision and order of the operating room, the drama, the blood, the anatomy. All these things make surgery interesting to some.

But internal medicine always pushes you to new levels of understanding. Illnesses have nuances that become apparent only after you've seen the process unfold in patient after patient. Internists are always challenged to expand and broaden their knowledge base, to

synthesize unrelated facts into cohesive wholes, so that something new is seen in the process. To those of us driven by this sort of intellectual curiosity, internal medicine is a veritable cornucopia.

Frankly, the future has never looked brighter for internal medicine than it does right now. Whether or not one "believes" in HMOs, some sort of managed health care is bound to be a part of America's health care delivery system in the future. Do you think these corporate giants, which now employ more than 75 percent of new doctors just completing residency, are looking for another ophthalmologist, orthopedic surgeon or dermatologist? No, they're looking for primary care providers: internists, family practitioners, pediatricians, ob/gyns and psychiatrists.

*Each new patient
I encounter is like
the start of an
engrossing narrative.*

Somehow, this fact has not trickled down to most medical students poised for the Match. Whether one looks at the track record of HMS or elsewhere, students (often concerned about money and lifestyle) are simply not opting for internal medicine any more, but are running in droves to the subspecialties. Is this really because these students have an overwhelming interest in cataracts, hip fractures or acne?

The point is that even if students were concerned about becoming the next Donald Trump or having time to write that second novel, ophthalmology (for instance) may not be the way to go, especially in light of present trends. The prominence of HMOs and managed care, the search for primary care doctors to man posts in these and similar institutions, and most recently the publication of the Harvard Relative Value Scale, may reverse what I have always considered an injustice within the medical profession. Time spent with patients in managing complex, chronic illnesses like diabetes, hypertension and depression may now be considered as important (from a remunerative standpoint) as removing someone's cataract, and there may now be other ways to get reimbursed than to *do* something to patients in the way of a procedure. All these factors point a favorable finger

towards internal medicine for those "merely" interested in money or lifestyle.

No, I will never make as much money as a neurosurgeon or radiologist, but that's not why I chose medicine in the first place and, frankly, if making a lot of money is your primary objective, I would suggest an application to business school (the pay is better and you don't have to sleep on the job). I chose medicine, and internal medicine in particular, because it's immensely interesting, never dull, always challenging and fun.

A good internist is also something our society needs, especially in the black community where I practice. This reminds me of the '60s tune "What the World Needs Now is Love, Sweet Love": Lord, we don't need another -ologist.... What the world needs now is a good, empathetic primary care doctor, someone who treats his patients like members of his own family, who cares enough to review cases thoroughly, to find the best specialists and therapies available, to treat others, in a sense, the way *he* would want to be treated if the tables were turned.

I guess what I'm saying is that what really is important is that you do something you love. If reading CT scans turns you on—right on. But you have to do something that makes you get up in the middle of the night, something that ignites you and spurs you forward. Hopefully this something will also help make the world a better place. As Polonius says to his son Laertes in "Hamlet": "And this above all, to thine own self be true." Be true to yourself; that's what is most important. □

Michael T. Myers Jr. '85 just finished his residency in primary care at Mt. Auburn Hospital and has opened a private practice in Dorchester.

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Meaningful Moments

by William Branch, Dale Matthews and Anthony Suchman

In the past few years we've participated in discussions with other physicians that have been both surprising and gratifying. We call the discussions "meaningful experiences in medicine." Two of us (WB and AS) first did this during a course on teaching medical interviewing sponsored by the Society of General Internal Medicine in Lexington, Kentucky in June 1986. Since then, we've had similar workshops at the society's annual meeting and, informally, with students in Harvard's New Pathway and residents at our respective institutions.

We began the first workshop by defining terms (what does 'meaningful' mean?) and drawing diagrams on a blackboard—in short, by engaging in an intellectual discussion. After about an hour, sensing that this approach was not satisfying, one of us suggested that each person in the group simply tell a story of some work with a patient that he or she found particularly important or personally rewarding.

This was much more satisfying. The stories captured our feelings. What surprised us was that no one in the group had previously shared these experiences

with colleagues. Most gratifying to us were the many common features of the stories. We all described caring about patients as people, but finding this caring difficult to express. We described wanting to help them in ways that went beyond strictly technical care, and how we struggled to do so.

The life-work of a physician should be a deeply meaningful human experience. Yet nowadays the negative aspects of medicine—malpractice, regulations, bureaucracy, long hours, less pay—receive the lion's share of attention. Applications to medical schools, and especially to internal medicine residency programs, are declining. We wonder if the many positive features of medicine are inadequately emphasized? Our experiences, and the ones told to us by colleagues, convince us that physicians' work remains immensely rewarding for doctors who can grasp the potential for fully developing their relationships with patients.

As always, stories of encounters with patients convey our meaning better than abstract concepts. In this spirit, we offer three stories. The patients' names have been changed.



*There are no heroes, just people **

A.S.: Returning to my office from a meeting across town, I found my desk covered with messages: "Joyce wants to see you as soon as you get back"; "Call Joyce's husband ASAP—wants to know why she needs blood"; and "Joyce called again—don't forget to see her."

Joyce is a 38-year-old woman, a mid-level executive in a local firm and a mother of two. She was in the hospital convalescing from a second attack of biliary colic and was due to have both a cholecystectomy and a staging laparotomy the following morning. At the time of this episode of biliary colic two months earlier, a large mediastinal mass was discovered on her chest film. An extensive biopsy through the supraclavicular fossa was nondiagnostic and quite painful. Two weeks later she had a thoracotomy for excisional biopsy of the grapefruit-sized mass, which proved to be Hodgkin's disease.

"Why do I need a transfusion?" she demanded when I entered her room. "With my luck, I'll get hepatitis."

I had checked Joyce's chart before seeing her to make sure nothing new had developed since morning rounds. I told her that the surgical team had ordered a type and cross-match, not a transfusion.

"Well, a person came around to draw more blood this afternoon. I asked why they needed more when they already took several tubes this morning. She told me it was for a blood transfusion. I started to get the feeling that nobody was telling me what's going on around here." Joyce pursed her lips; her arms were folded tightly across her chest.

Putting together the frantic phone messages, the worry about hepatitis, the frustration and anxiety over her protracted diagnostic evaluation, and her present body language, I realized how much more frightened she was than she wished to show.

"This has been a hard day for you, hasn't it?" Her shoulders sagged. She lowered her head for a moment and then looked up at me, her eyes filling with tears. All at once, I could feel her fears of a painful postoperative recovery, of her children without a mother, and of losing her ability to work. But even more than that, I sensed her dismay. She had been trying so hard to remain in control and to hide these fears from herself and from her husband who was on the threshold of panic. Now, suddenly realizing how desperate and exaggerated her response to this unexpected phlebotomy had been, she recognized her own underlying panic.

In the next moment, I sensed that she knew I was feeling her worry and dismay and that it was reassuring to her, as if my feeling it meant that she wasn't crazy. I felt my own eyes well up, and I had a silent chilly feeling with gooseflesh on my neck. It was a vivid, almost uncanny moment.

"There are no heroes here," I said, taking her hand, "just people."

A.S.'s comments:

I should first say something about how Joyce is doing. She is one of the bravest people I know, although she'd be the first to deny it. Her next 18 months

were very difficult. No sooner did she recover from one procedure or complication than another problem would develop. I am at a loss to understand how so many things can happen to one person. But she and her family faced each situation and never stopped believing that she would get better. And now she is better, works nearly full time, and has resumed most of her original roles and responsibilities in her family and community. We have a very close relationship, and moments such as that described in the original vignette still occur from time to time.

As for me, that peculiar experience with Joyce, and similar experiences with other patients, led to a profound change in my work and life. I came to recognize a dimension of experience previously invisible to me, one concerned with meaning and with connection to other people. It's difficult to describe.

I now appreciate a new level of relation, to use Martin Buber's term for it, a sense that I am a subject encountering other subjects, rather than a subject merely regarding an object. (The latter perspective was imparted to me, perhaps inadvertently, by the heavy emphasis upon positivist science in my medical training.) For me, the discovery that the subjective/intuitive is as valid and important a domain as the objective/rational marked an enormous re-direction of my thinking. It changed how it feels to live my life.

I think that this appreciation for subjective experience is a crucial part of making medical care less mechanical for patients and more satisfying to physicians. This has become one of my primary subjects of study, writing and teaching.

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A Routine Office Visit

D.M.: I didn't recognize her name when I scanned my list for the day. I frowned. I thought I had told the secretaries that I couldn't accept any more new patients for a while. Furthermore, there was not enough time allotted for a complete history and physical. But, flipping through the chart quickly, I saw that I had indeed seen her once before, last year, for nasal congestion and mild hypertension. The frown passed, and by reflex, a finely-honed smile took its place.

I knocked on the door of the examining room, walked in, sat down, and asked my customary opening question, "What's been happening?" She paused, and then spoke, hesitantly at first, "I have good news." And then with a nervous smile, "I'm pregnant!"

Suddenly, the chart notes came to life. Seven long years of trying to become pregnant. All the visits to the ob/gyn service for infertility. Tubal surgery, fertility drugs, in-vitro fertilization. She had begun to lose hope. Finally, some good news.

She said she couldn't believe it. She and her husband had been pinching themselves sore for the past day, wondering if it were really happening, fully expecting to awaken tomorrow and find that it had all been a dream. A tear formed in her eye.

I paused. A warmth filled my chest and an electric sensation coursed the back of my neck. I thought of the day I found out I would be a father for the first time, that heady day when everything was vivid and all seemed possible in a way I had not understood before. I thought of my brother waiting feverishly for the set of twins that would come any day now and change his life forever. I thought of my parents, who had been forced not only to endure slings and arrows from the two of us, but also to accept the cruel fate of having two other infants ripped from their grasp by fatal illness.

I leaned over the desk, looked into her eyes, smiled, and gave her a hug. A long hug. "I'm happy for you," I murmured. "We have so much to be thankful for." Her tears flowed freely now.

"I'm so happy," she wept. "For years I cried because I couldn't have children, and now, finally, I'm crying because I'm happy."

Eventually we got around to her rhinitis and to her blood pressure, and the effect that her medicines might have upon her pregnancy. But I think I gave and she received something more than an examination, advice and a prescription.

D.M.'s comments:

Somewhere along the line I became a hugger. It took me awhile. I thought it might be considered unprofessional at best, and at worst, seductive. Then a couple of years ago, I decided that it was important to respond to intensely charged events like this one in a manner that anyone else close to the patient might. To hug.

I'm glad I did. My patient radiated a sense of joy, of relief, of anticipation. Her tears of happiness overcame years of frustration and anguish. In a vicarious way, I sensed her feelings and both rejoiced and mourned alongside her. I rejoiced for my children, being thankful for their health, and I blissfully contemplated the imminent arrival of my brother's twins. I mourned for my parents and the loss of brothers I never knew.

All this flashed by me in an instant. I could have dismissed these thoughts as an unnecessary distraction from the "real" work of deciding how to manage allergic phenomena and hypertension safely throughout pregnancy. And yet, I believe that the real work was accomplished by the hug. The sharing of mutual feelings created trust and understanding. I believe this was more important in the long run than the choice of an antihistamine-decongestant combination, or of an antihypertensive drug.

I'm not altogether sure that professional distance between patients and physicians is a good thing. The "stiff upper lip" professional demeanor that accompanies a traditional, authoritarian type of doctor-patient interaction does not encourage intimacy. "Don't get involved" echoes that persistent voice from our early training days. "Your objectivity will be threatened and you will become ineffective." Is that really so?

We all might agree that the more we get to know our patients, the better care we will be able to give them. We

tell our students to concentrate on patients' social histories, and we encourage them to discover patients' "hidden agendas" and their hopes and fears. In short, we expect patients to be intimate with us, but don't make the same promise to them.

Research indicates that mutual self-disclosure facilitates intimacy and is needed to maintain it. We too have needs for intimacy, some of which are met through our work; we too have joys and sorrows, times of rejoicing, and unresolved grief. Of course, the patient-physician relationship is a fiduciary one, in which the physician pledges to serve in the best interest of the patient. In this relationship, our own needs should be met only if doing so is also beneficial to the patient. Some patients would not benefit from their physicians' self-disclosures or displays of intimacy. Yet, in most instances, because both patients and physicians search for meaning and connection in their lives, both benefit from more intimacy, sharing and self-disclosure than has been part of the traditional patient-doctor relationship.

There must be carefully defined limits, though, in our relationship with patients. For example, intimacy should not be confused with sexuality. Sexual relations between a patient and physician are a breach of trust and an abuse of power. A hugger needs to practice "safe hugging" using arms and shoulders, and avoiding any pelvic contact that might be misinterpreted as a sexual signal.

I believe that the most important features of patient-doctor communications are the physician's perceived level of caring and ability to listen. By recognizing the emotional message and the need in my patient's first words, and by displaying my own joy at her good fortune, I demonstrated to her that I cared, and that I wanted to listen. If I had passed by this patient's initial remark with only a pleasantry like "that's nice" and confined my work to the business of measuring blood pressure and checking for sinus tenderness and nasal drainage, the opportunity would have been lost.

But the combination of professional skills—imparting understandable information, allowing questions and patiently responding to them—and empathetic concern makes the patient-doctor relationship itself therapeutic for the patient. Personally I find this rewarding and satisfying. Forming and maintaining close relationships with patients meets my needs for connection with others, and imparts meaning to my work.



Mr J, dying of lung cancer

W.B.: When I saw Mr. J sitting on his chair in the emergency room cubicle, a hospital gown draped over one shoulder and a plaintive look on his face, I remembered the sinking feeling I'd had eight years before upon reviewing his chest film in Dr. Copeland's office. There had been a distinct 2 cm pulmonary nodule beneath the right clavicle that to my chagrin had also been clearly visible, on a chest film taken six months previously. With surgery followed by post-operative radiotherapy, Mr. J thankfully had remained free of any sign of recurrence until a new primary adenocarcinoma of the lung showed up on another chest film five years later. This one, however, had recurred, with liver metastases, which was producing the weakness and loss of appetite that led to his current emergency room visit.

I remembered what Mr. J had said about me eight years earlier: "You're young, but you're very thorough. I like that. That's the kind of doctor I want." But I hadn't felt very thorough. The radiologist's reports of Mr. J's routine chest film had at first identified a possible radiodensity, but after an apical lordotic film, had dismissed the density as a confluence of vascular shadows. I didn't look at the chest films myself.

It was only at Mr. J's request when he came back six months later for his next routine visit that we took another chest film. I saw no reason why he needed one. Mr. J, however, had said, "I just have a feeling. I'd feel better if you'd get another X-ray." When I got that report back, I called Dr. Copeland,

"Could you see a patient for me. I think we have a problem, possibly a pulmonary nodule."

In Dr. Copeland's office that day, we pulled the films from six months before. The density was easily visible on the apical lordotic as a suspicious pulmonary nodule. The radiologist must have been blind on the day he had read these films. Despite the interpretation error, everything had worked out all right, thanks to a decisive thoracic surgeon who moved quickly to rectify the situation.

But a lot had happened since then. Now Mr. J was swaying on a chair, much thinner, weak, his eyes filled with fear and discomfort. His second cancer had progressed to its final stages. I tried to be calm and reassuring, listened to his lungs and heart, took the blood pressure, felt the abdomen. Intravenous fluids were running. The decision to admit him was obvious. I told him this and started to leave.

Mr. J tried to say something but stammered inarticulately. The place was a mess. He had lost control of his bowels, and feces covered the floor beside his chair.

I wasn't anxious to stay in the room long but turned when he tried to talk. He tried to indicate something. At last it dawned on me that he wanted me to clean up the feces. He was terribly embarrassed to be sitting helplessly in the room with feces on the floor.

I nodded that I understood, took some towels from the shelf, wet one of them, wiped up the feces quite thor-

oughly, then tossed the towels in the waste basket. Mr. J, still unable to speak clearly, nodded and indicated his thanks. He was nearly crying.

This was the debonair man who'd often come to see me with his wife, a small, anxious, retiring woman. They argued a lot. He wanted to go out to lunch, she wanted to stay in. Somehow, it was always a question of their health, and I was involved as mediator. Mr. J used to be in the clothing business, and always dressed in a suit and tie, with shiny shoes and sometimes a flower in his lapel.

As his second cancer began to spread, things became difficult. Mr. J was angry. He wanted to live longer. He often took it out on his wife, sometimes with harsh words in the waiting room. When I tried to talk with him about his disease, he changed the subject.

I tried to be understanding. "This must be tough for you," but got nowhere. "I'm okay," he'd say. "Can you take another chest X-ray? I'll come back next month." Or if I talked about his wife, "Mrs. J is trying hard, she wants to help you," he might say. "She doesn't understand. All she wants to do is sit around. I like to get out. Why don't you talk to her about that."

But Mr. J's tumor grew and spread to his liver. During his final hospitalization, he remained angry and difficult to communicate with. He was stronger after receiving intravenous fluids, but I held off sending him home, largely because his wife was near collapse. He was so weak and had lost so much weight that it was difficult for him to deny being sick. Still, when I tried to say something like "It's been hard for you" or "Let's talk about how you're feeling," he'd change the subject. After five minutes, there was little left to say. Mr. J was dying of cancer. He was angry

and didn't want to talk about it. I wasn't helping. My efforts only ended in awkward silences.

I still felt that I had a good relationship with my patient, and didn't feel that most of his anger was directed at me. He didn't blame me for the second cancer, picked up as early as possible by chest film. I'd often felt that I could work well with dying patients, and Mr. J was one of my oldest.

One day as I entered his room, a different approach occurred to me. Rather than asking about symptoms, trying to understand how he felt, or inquiring if he had questions or wanted more information, I sat at his bedside and just began a regular conversation. "You were in the clothing business. How did you ever get into that business?" Mr. J sat up a little, his eyes met mine, and his voice picked up strength. "Well, that's quite a story. Did you know I made \$40,000 in one day? That was a lot of money in 1937. That's how I got started; I had a chance to buy a whole shipment of clothing. I knew they were good clothes. I knew they would sell. It was a question of borrowing money and making the deal."

I listened for thirty or forty minutes. He told me about his business, how he met his wife, his marriage, more business ups and downs, right up to his 50th wedding anniversary. "That was quite something," he said. "Quite something."

I'd had an image of him: angry and alone, a man whose life had narrowed down to his bed in a nearly bare room, with death approaching. As he told his story he became a whole person, a businessman, a husband, clothier, son of Jewish immigrants, grandfather of college students. It was as though he recaptured these memories of his life. It changed him. Did he accept death? I never knew this for certain.

The next day he weakened markedly. We talked a little bit, again about business and marriage. He smiled weakly. Before I left he asked, "Will you do one favor?" I nodded, and he indicated a plastic basin containing vomit lying beside him. These things are not so noticeable to doctors. I took the basin across the room to the sink, rinsed it out, dried it with a paper towel, and brought it back to the bedside. His eyes met mine, and his nod of thanks seemed to acknowledge mutual understanding.

That night the medical resident called to ask, somewhat huffily, "When are you sending Mr. J home? He's perfectly stable and no more treatment is planned." I said, "I don't think yet. His

condition is deteriorating. Let's watch him for a few days." "Well if you say so. I don't think he's changing." About 20 minutes later the phone rang. It was the resident. "It's amazing," he said, "You were right. The nurse just called me and he's dead. Died peacefully in bed. I guess it was the best thing."

Yes, I thought, the best thing.

W.B.'s Comments:

I see stages of my development as a physician in my work with Mr. J. When he first came to see me, he knew what he was looking for, a technically competent physician. He wanted to buy good health, and was prepared to pay for it. He picked me for a variety of reasons—the excellent reputation of my hospital, my recommendation from a highly respected surgeon, the prestige of the training program from which I graduated—and I strove to be what he wanted.

On the surface I was knowledgeable. Underneath I was quite insecure. The fate of Mr. J, the victim of a misread X-ray, hit me in a vulnerable place. I was less than perfect; I hadn't looked at the X-ray myself. Events later rescued me, and though Mr. J eventually did succumb to cancer, it was a second primary one, unrelated to the technical lapse that delayed treatment of his original tumor.

Later, I began to think that without losing technical competence, I could develop skills to help people who were dying, and who were no longer able to benefit from medical treatment. After some successes, Mr. J posed a dilemma for me. Since dying patients are often lonely and feel abandoned, someone who stays with them is usually rewarded with gratitude. Mr. J, however, rejected my efforts to help.

Out of this I learned a simple lesson: I am really like him. It wasn't by being a good medical interviewer that I reached him; it was by being an ordinary person.

Dying is painful and frightening. It isn't easy to be the friend of someone in that condition, any more than it's easy to clean up vomit or feces without showing disgust. This is a lesson that helped me. It's one that from time to time needs relearning.

Each of these stories describes a doctor who endeavors to help a patient, but finds that more is needed than diagnosis and treatment. We see the doctors try to understand this need, and to find a way to meet it. What works in each case is some type of

human contact. The doctors in our stories discover this. But they have to go past the usual doctor role in order to offer more of themselves to the patient. What becomes "meaningful" to the doctors is that they risk doing this, it works, and they feel rewarded through understanding and helping their patients on a personal level.

Why is it difficult for doctors to work with their patients on this level? Patients confide practically everything to us. They disrobe. We see them in the morning on rounds, eating breakfast, with no makeup, unshaven. We see them in pain, frightened, confused. They talk about the most important things in their lives. But we act as though we ought to stay detached.

Of the many reasons for this, two can be stated quite simply. Getting too close to people who are suffering or dying may be painful. And people who are sick, physically or emotionally, have compelling needs, and getting too close to them can feel overwhelming.

The doctors in all of our stories get close to their patients. Their actions are the everyday actions of ordinary people. Their discoveries of ways to provide emotional support or companionship to a sick person (or in one case, even a joyful person) are everyday gestures. Yet to do this for a sick or dying person feels risky and requires skill and courage; done successfully, it is deeply rewarding.

Understanding another's feelings depends on being aware of one's own feelings, but doctors often suppress their own feelings. So perhaps we should not have been surprised that the physicians who told us stories had rarely talked about their experiences of closeness to patients with other colleagues. Physicians may tacitly agree that these occurrences are out of bounds for discussion. Yet in our workshops, every participant had a deeply meaningful personal experience to tell.

Some of the experiences told to us were complex and even painful. A young female doctor described a nightmarish night sitting at the bedside of a terminally ill cancer patient who had perforated a duodenal ulcer. She knew that surgery could repair the perforation, but the patient had incurable lung cancer. He begged her, "Please, no surgery, just let me die." She felt guilty, uncertain and alone.

Then she was surprised when a fellow doctor, apparently understanding how she felt, offered to cover her other patients while she remained with this one. Her patient had been estranged for several years from his oldest son.



She called the oldest son, and arranged for him to spend a few hours with his dying father. Even the profuse thanks of the patient's son, deeply grateful for the opportunity to reconcile with his father, did not alleviate all of the guilt and uncertainty, still evident as this young doctor told her story. She felt lonely with the burden of having allowed her patient a peaceful death.

A disproportionate number of all the stories were about dying patients. It was necessary to establish an atmosphere of trust and mutual respect before participants felt comfortable talking about these patients. The doctors' feelings of inadequacy stood out, yet their struggle and risk-taking, or just sticking with their patients, yielded rich rewards.

One resident physician made regular housecalls on a woman dying of amyotrophic lateral sclerosis. When the family called to say that her condition had worsened, the doctor was unable to come because he was giving a lecture. Several hours later, he went to the home, expecting somehow that the family would blame him for not having been there when his patient died. He was welcomed and brought into the living room, surrounded by the woman's grateful sons and daughters, who "told me they felt like I was a member of their family, and had hoped I would be with them after their mother's death."

Another young physician was confronted by the angry wife of a man dying of cancer for whom the doctor had mistakenly replaced a feeding tube. "Why are you doing this," the wife said, "I asked that they leave him alone." The young physician explained that it was a mistake and offered to remove the tube, then stayed with the wife for an hour or more as she sat with her husband. Even so, this young doctor

blamed herself for upsetting the wife for several weeks after the patient had died. Then one day a nurse on the unit approached her and said, "It was so wonderful what you did. None of the other doctors spent much time with that patient and his wife. We were impressed, and Mrs. X was deeply grateful."

These young doctors, working under stress, struggled with experiences similar to those in our first three stories, but often found their interactions with sick people confusing. As the powerful, positive aspects of working with patients surged over them, validation of their own feelings—and of what they accomplished for their patients—came from a family member or a nurse.

If sent out into hospitals and offices to see patients without adequate preparation for the interpersonal and emotional aspects of medical practice, it is hardly surprising that they find these experiences confusing, even overwhelming. Withdrawing from patients under such circumstances may be a perfectly sensible coping mechanism. But when this becomes ingrained as a way of life, both patients and doctors suffer.

The first three stories, told by more experienced clinicians, reveal doctors who are learning to make their interactions with patients beneficial. They struggled too, but consciously sought ways to provide the solace to their patients that comes from companionship and understanding.

We think that the tasks undertaken in our stories represent milestones in physicians' life-work. Mastery of these tasks probably determines the extent to which one's career in medicine becomes truly meaningful and worthwhile.

Where should we go from here? We've seen that doctors need to find meaning in their work. We know well

that patients want humanization of care. We think that both goals would be served by changing the process of medical education to give new physicians more encouragement to explore, understand and make therapeutic use of their feelings.

While a variety of pedagogic tools are readily available—role playing, review of audio or videotapes of interactions, behavioral sciences seminars—our current interest is in workshops, where young doctors can share their experiences. As faculty, we can listen and model the sharing of feelings about patients, uncertainty and mistakes. We can help students to recognize their successes, to feel that their patients' gratitude (which they often feel is undeserved) is genuine, and to appreciate the joys and special moments of medical practice. We can help them discover enabling solutions to the conflicts they encounter, such as the problem of taking control and responsibility for treatment decisions versus sharing decision-making with patients and colleagues.

Some day we envision time for all this being set aside in the curriculum—a time for medical students and residents to talk regularly about their experiences with patients. After all, it is their experiences, not our stories, from which they will learn the most. □

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Edward D. Churchill '20 was for thirty years John Homans Professor of Surgery and chief, first of the West, later of both surgical services at MGH. He retired to emeritus status at the beginning of 1962. He had a habit of writing things that have remained relevant, as illustrated by this Lahey Memorial Lecture, published 25 years ago in The New England Journal of Medicine. Change "men" to "persons" in the graphs; sprinkle the introduction like malpractice and a regulations, and you target today. Twenty-three journal, Carola Eisenberg message to students that a doctor: A hero to many respected if not always one's book Edward D. Pangloss. And bear in the American Surgical



second and last paragraph with a few items tangle of paperwork and will find him right on years later in the same repeated the important it is still a privilege to be of us, universally re-agreed with, in any Churchill was no Dr. mind his injunction to Association 40 years ago:

"In times of change there is need for wisdom both in the external social order and within the profession. Spokesmen who loudly proclaim measures based on self-interest will not be tolerated. . . . By maintaining the ancient bond with humanity itself through charity—the desire to relieve suffering for its own sake—surgery [medicine] need not fear change if civilization itself survives."

—J. Gordon Scannell

The question asked in my title is in the minds of thousands of young Americans as they are assembling in preparatory schools and colleges during the month of September. The findings of commissions, panels and groups of experts who have predicted a growing medical manpower shortage in America are familiar to all and need no repetition. Nor shall I repeat the jeremiads of the deans of medical schools that applicants in general do not measure up in either quantity or quality to those of a decade ago. Without discounting their importance I shall not dwell on the economic factors, easily identified in the high cost of medical education and the length of the course to which the extended training periods for specialists are additive. To my mind these economic factors are important but not overwhelmingly determinant as some believe.

There has been little helpful information offered by psychologists and sociologists engaged in studying the forces that shape the choice of a career by young men. Much of their effort has been directed toward the selection of applicants from those who have already expressed a desire for specific educational programs. Even in this matter factual inquiry has begun so recently that conclusions hastily drawn are unlikely to prove justified. The prediction of the future performance of an applicant in a given field, however, is quite a different matter from the discovery of the reasons that have led to a decreasing number of applicants for the field.

For the purpose of the present discussion, I shall start with the conclusions of a study conducted by the Bingham Associates Fund in 1959. These at least provide the basis for constructive action at the level of the practicing physicians. The decreasing interest in medicine among the students of the several colleges in the State of Maine caused concern for some years, and when in 1959 only 16 students from the entire state entered medical schools, a determined effort was made to find the reasons. Obviously many factors are involved, but the study identified two reasons as basic: *a lack of proper information* on the subject of a medical career; and *an abundance of misinformation*. These applied not only to the students themselves but also to those from whom the students were supposed to be getting the information.

These two basic reasons bring the problem down to the level of the individual doctor. It is from the doctor,

with all due respect to expert nonmedical career counselors, that the talented youth of the nation should be deriving proper information and a minimum of misinformation. An active effort to provide contacts and disseminate information about careers in medicine to college students in Maine is proceeding under the auspices of the Bingham Associates Fund with the full co-operation of college presidents. Its results will be awaited with interest.

Even if the opportunity is provided for greater contacts between doctors

establishment of a relation between doctor and college student is quite a different matter. It is not a task for an amateur. Doctors must be found who understand the attitudes and psychologic difficulties of the contemporary college generation and at the same time can interpret the complexities of the medical profession in an objective and understanding way. College youths are realists demanding answers to questions that cannot be evaded or swept aside by prejudiced or vague reassurances. They want to know about the attitude

Should I Study Medicine?

by Edward D. Churchill

and college students, the task of imparting information and minimizing misinformation is not likely to prove an easy one. In fact, I suspect that some of the misinformation now being disseminated finds its origin in doctors themselves. The situation recalls what has been said about what patients want. "They want more of the doctor's time! Doctors are too busy . . . We'd like to talk more, to tell them more; we'd like them to explain more, to listen more." Medical teachers and writers are continually exhorting doctors to give more time to their patients, and the doctor is supposedly expert in establishing the doctor-patient relation.

From my observations, however, the

of the American Medical Association. How soon is medicine going to be brought under governmental control? Why do doctors cover up the mistakes of colleagues? Why is unnecessary surgery tolerated? Those and many similar questions have to be met head-on with convincing explanation.

I find too many doctors lazy and slipshod in their own thinking about such matters—and too many who are unable to do more than shrug their shoulders and retreat with an embarrassed laugh.

On all sides I sense an apologetic self-derogatory mood in the profession and a lack of the conviction that should uphold the dignity and importance of

It is time this self-conscious and self-abasing trend was reversed and the doctor's dignity reasserted, for in Kipling's words, the doctor is among the most important people in the world.

the position of medicine in contemporary culture. Self-criticism and continual striving toward improvement are essential within the profession, but it seems to me that important presidential addresses too often take on the pattern of a tirade against the old perennial evils of fee splitting, unnecessary surgery and incompetent medical practice. All this amounts to what formerly was called the public washing of dirty linen. Today, however, such pronouncements are seized upon by journalists and others who deal with medicine more and more at second hand. Their ripples spread far.

Gifted lay amateurs enter the scene with opinions supported by charts, graphs and statistics purporting to deal with the shortcomings of the medical profession. A Canadian professor of social and preventive medicine has recently written as follows:

Such data can only be obtained from a variety of unrelated sources. The sources used, and the information obtained, frequently reflect the bias and prejudices of the investigator. It is quite understandable, under the circumstances, that an infinite number of judgmental pronouncements on psychosocial economic topics are made by innumerable self-appointed experts. These experts may be heads-of-States, sociologists, economists, playwrights, novelists, psychiatrists, columnists and even ordinary physicians.

Frustrated in their well meaning efforts to correct socioeconomic evils and neglects, their indignation becomes centered on the doctors for their seeming "indifference." The "hard-faced" doctor thus emerges, as did the "hard-faced" industrialist, as a popular target of abuse.

Even senior medical students have become bewildered by the turmoil that they begin to sense and the accusations thrown in their faces by contemporaries in other professions. Recently, I read aloud to a small group of students the familiar address, "A Doctor's Work," given by Rudyard Kipling to the students of Middlesex Hospital in October 1908. It contains such passages as the following:

Every sane human being is agreed that this long-drawn fight for time that we call life is one of the most important things in the world. It follows, therefore, that you, who control and oversee this fight, and who will reinforce it, must be amongst

the most important people in the world.

Not one of these students knew of this classic address, which I wish I had time to quote *in extenso*. Their response contained a note of pathos: "We wish someone would say such things about us today!"

I am both annoyed and indignant when I hear glib lay panels assembled to discuss the so-called "tarnished image" of the doctor. Picture the righteous anger and quick repartee of Dr. Lahey if he encountered such a phrase! I have known thousands of doctors during my professional life and have helped educate thousands more. I am proud of being a doctor—I am proud of being a surgeon. It is time this self-conscious and self-abasing trend was reversed and the doctor's dignity reasserted, for in Kipling's words, the doctor *is* among the most important people of the world.

Douglas Robb, of New Zealand, also lost his patience in the face of criticisms of the profession:

In recent years . . . the medical profession has been freely criticized for self-interest and neglect of public duty. Without doubt, in my opinion, there has been some substance in these criticisms, but the main factor working against the effectiveness of them has been the hollow note in the voice of those who make them. When we hear the wharves humming with happy shouts of the Sunday workers proudly turning the ships around to get the butter more quickly to the Old Country—when the coal-getters ask leave to work on a holiday rather than let the national bunkers get low—when the politician resigns rather than be party to a political bribe or favour contrary to the public welfare—then these criticisms of the doctors will make more impression. In fact, as rackets go, the medical one has never been a particularly harmful one.

But, as I have warned, indignation and countercharges feed the fires of controversy and are not persuasive to modern youth. A reasonable and calm analysis of the situation is required. Youth today prides itself on the rational approach, and Kipling has been relegated to obscurity with other romantics. The background of the present situation is well worth a brief scrutiny.

The central fact of history in what is recognized as the Western World is unquestionably the decline of religion. It has been said that Christianity could not have arisen if its teachings had not

contained the miracles of healing attributed to Christ. Despite the slow separation of medicine from divinity over the centuries, traces of the ancient linkage between the two great learned professions can still be discerned. The friendly division of responsibility toward man has left the soul and the nurture of man's spiritual life to religion and defined the mind and the body as the province of medicine. I shall return in a moment to this central fact of history.

The waning of religion has paralleled the ever increasing organization of human life along rational lines, a trend recognized by Max Weber as another central process of modern history. The industrial revolution and the scientific revolution, with the growth of capitalism, have brought the organization of economic enterprise in the interest of efficiency. With this has come the subdivision of human function in factories and industrial cities. Man as an individual has become man in aggregates or collections of men acting in unison, with a high value on conformity in behavior and actions. One speaks of collectivized man and the domination of his life activities by technology.

It is not generally appreciated that medicine, with the exception of public health, naturally centers on the needs of the individual and in the present stage of its evolution is poorly adapted to deal with the mental or physical needs of man in the aggregate. Military surgery furnishes a prime example of treatment applied to man in the aggregate, but even with armies in combat, the hypothesis of "the greatest good for the greatest number" is rarely put to the actual test. A few other exceptions come readily to mind, but the subject need not be labored further. The key point to be recognized is the conflict encountered when an attempt is made to adapt the highly personal service of medical care to the socioeconomic changes that have produced collectivized man. Effective therapy is as often as not based on and dependent on the interpersonal relations of doctor and patient. Conflicts today center in this zone of socioeconomic tension, and it has been the evolutionary trend in society itself rather than the self-interest and cupidity of the medical profession that has produced the furies and socioeconomic dilemmas that beset contemporary medical practice.

To return to the decline of religion and its particular significance to medicine, William Barrett in a skillful metaphor has described religion as "not so much a theological system as a psychological matrix surrounding the individ-

ual's life from birth to death, sanctifying and enclosing all its ordinary and extraordinary occasions in sacrament and ritual." With the dissolution of this matrix man has been cast adrift. He is searching desperately for support and meaning in life.

The image of the healer was ever a constituent of man's religious matrix. Small wonder that man is now seeking out the physician for symptoms that arise in frustrations, loneliness and uncertainty. The ascendancy of psychiatry bears witness to these needs.

If this were not enough, the relentless trend of socioeconomic evolution and the increasing collectivization of man have brought the circumstances that surround the socioeconomic consequences of offering help to the individual into the spotlight. To help one's fellow man when he was in distress was once a simple act—the kindly and self-rewarding act of the Good Samaritan recorded in the great book of Saint Peter. Today an analysis of the act is punched in code on an IBM card, and not even Heaven knows what ultimate interpretation may be made of the data.

So far as the "tarnished image of the doctor" is concerned, this phrase can be taken in its literal meaning. An image is an imitation or representation, not a directly perceived object. It is subject to distortion by the mind that forms it. Tarnish on the image of the doctor is as likely to be the product of the mind in which it is represented as a flaw in the doctor himself.

And so to the young man who is pondering "Should I study medicine?" I say, seek information and above all, beware of misinformation. Doctors are still "among the most important people of the world." Every bit of evidence points toward increasing importance of the responsibilities that they must assume in the future. Mankind itself needs the wisdom of talented young men in medicine as never before. And to doctors everywhere I say, hold your heads high, cultivate professional dignity and self-reliance and be patient with the frailties of man. □

To help one's fellow man when he was in distress was once a simple act.... Today an analysis of the act is punched in code on an IBM card.

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FROM

The

Doctor

Stories

BY

WILLIAM

CARLOS

WILLIAMS

INTRODUCTION

by Robert Coles

A great privilege (and actually, turn of fate) befell me in the early 1950s, when I was encouraged by a fine professor-friend of mine, under whose supervision I'd written my undergraduate thesis, to send a note to William Carlos Williams and ask him whether he'd mind reading a college student's effort to understand his poetry, especially the first book of *Paterson*. This inquiry was not thoroughly gratuitous or self-serving,

Professor Perry Miller kept insisting—a response to my fearful hesitancy, an attitude which surely (I now realize) protected me from realizing how much of my pride, if not (as today's psychiatrists call it) narcissism had been put into that research and writing effort. This particular poet, Mr. Miller reminded me several times, was hardly a favorite of many college professors, and might well enjoy reading what a student writing in an ivy-covered dormitory library

managed to say about *Paterson*, wherein no huge flowering of ivy is recorded.

Soon enough, I'd dispatched my essay, and received a warm, friendly and lively response to it, coupled with an invitation to drop by; and soon enough I did. For me, to know Dr. Williams, to hear him talk about his writing and his life of medical work among the poor and working people of northern New Jersey, was to change direction markedly. Once headed for teaching, I set my sights for medical school. The result was a fairly rough time with both the pre-medical courses, not easy for me, and medical school itself, where I had a lot of trouble figuring out what kind of doctoring I'd be able to do with a modest amount of competence. During those years, ailing though Dr. Williams was, he found the time and energy to give me several much needed boosts—as in this comment: “Look, you’re not out on a four-year picnic at that medical school, so stop talking like a disappointed lover. You signed up for a spell of training and they’re dishing it out to you, and all you can do is take everything they’ve got, everything they hand to you, and tell yourself how lucky you are to be on the receiving end—so you can be a doctor, and that’s no bad price to pay for the worry, the exhaustion.”

Anyone who knew him would recognize the familiar way of putting things, of approaching both another person and this life’s hurdles: kind and understanding underneath, but bluntly practical and unsentimental. Not that Williams didn’t have in him (and in his writing) a wonderful romanticism, an ardently subjective willingness to take big risks with his mind and heart. His greatest achievement, *Paterson*, is a lyrical examination of a given city’s social history, from the early days of this country to the middle of the twentieth century—and the poet whose eyes and ears become the reader’s is marvellously vibrant, daring. But there is also in that poem, and in other aspects of Williams’ work a sensible and skeptical voice—the side of Williams these stories reveal to us: a hard working doctor whose flights of fancy are always being curbed by a sharp awareness of exactly what life demands as well as offers.

I will never forget an exchange I had with Williams when I was in my last

Excerpted from the “Introduction” by Robert Coles to *William Carlos Williams: The Doctor Stories*. Copyright © 1984 by Robert Coles. Reprinted by permission of New Directions Publishing Corporation.

year of medical school. He had been sick rather a lot by then, but his feisty spirit was still in evidence, and as well, his canny ability to appraise a situation—anyone or anything—quickly and accurately. I told him I wanted to take a residency in pediatrics. He said “fine,” then looked right into my eyes and addressed me this way: “I know you’ll like the kids. They’ll keep your spirits high. But can you go after them—grab them and hold them down and stick needles in them and be deaf to their noise?” Oh yes, I could do that. Well, he wasn’t so sure. Mind you, he wasn’t being rudely personal with me. He was just talking as the old man he was, who had seen a lot of patients, and yes, a lot

of doctors, too. “Give yourself more time,” he urged me, in conclusion. Then he regaled me with some (literally speaking) “doctor stories”—accounts of various colleagues of his: how they did their various jobs; the joys some of them constantly experienced, or alas, the serious troubles a number of them had struggled to overcome; the satisfactions of x, y, z specialties, and conversely, the limitations of those same specialties. It was a discourse, a grand tour of sorts, and I remember to this day the contours of that lively exchange. I told my advisor at medical school about the meeting, and I can still recall those words, too: “You’re lucky to know him.”

We are all lucky to know him, to have him in our continuing midst. Only in those last years of his life was William Carlos Williams, finally, obtaining the recognition he’d failed to receive for many decades of a brilliantly original, productive literary life. But during that early spell of relative critical neglect (or outright dismissal, or patronizing half-notice) this particular writer could rely upon other sources of approval. Every day of a long medical life (and often enough, in the middle of the night, too) he was called by the men, women and children of northern New Jersey, ordinary people, plain people who considered themselves lucky to hold a job, lucky to be able to get by, barely, or not so lucky, because jobless—families who had one very important loyalty in common, no matter their backgrounds, and they were ethnically diverse: a willingness, an eagerness, a downright determination to consider one Rutherford doctor their doctor, W.C. Williams, MD. . . .

America’s Depression was a disaster for Dr. Williams’ patients, and many of them never paid him much, if indeed, anything at all. America’s Depression was also a time when a marvelously versatile, knowing, and gifted writer who happened to be a full-time doctor was not having any great success with critics, especially the powerful ones who claimed for themselves the *imprimatur* of the academy. No wonder this writing doctor was glad to go “outside” himself, greet and try to comprehend a world other than that of literary people. No wonder, too, he shunned the possibility of a relatively plush Manhattan practice—the doctor to well-known cultural figures. His patients may have been obscure, down and out, even illiterate by the formal testing standards of one or another school system, but they were, he had figured out early on, a splendidly vital people—full of important experiences to tell, memories to recall, ideas to try on their most respected of visitors, the busy doc who yet could be spellbound by what he chanced to hear, and knew to keep in mind at night when the typewriter replaced the stethoscope as his major professional instrument.

I remember asking Williams the usual, dreary question—one I hadn’t stopped to realize he’d been asked a million or so times before: how did he do it, manage two full-time careers so well and for so long? His answer was quickly forthcoming, and rendered with remarkable tact and patience, given the provocation: “It’s no strain. In fact, the one [medicine] nourishes the other



William Carlos Williams, late 1950s

PHONE: RUTHERFORD 2-0660
REG. NO. 3610
WILLIAM C. WILLIAMS, M. D.
 RUTHERFORD, N. J.
 9 RIDGE ROAD
 OFFICE HOURS: 1 TO 2 P. M. EXCEPT FRIDAY
 EVENINGS 7 TO 8 P. M. MON., WED., THURS.

NAME **AGE**
 ADDRESS **DATE**
 R
 Where are the good
 winds of
 good day -
 The murderer
 Vilon the saint
 with his sawbones
 well & lessore
 easier. who
 prouid freely
DAVENPORT DRUG **116 PARK AVE.** **RUTHERFORD**

First draft of *The Clouds II*, scribbled onto prescription paper, September 1944.

[writing], even if at times I've groaned to the contrary." If he had sometimes complained that he felt drained, over-worked, denied the writing time he craved, needed, he would not forget for long all the sustaining, healing, inspiring moments a profession—a calling, maybe, it was in his life—had given him: moment upon moment in the course of more than four decades of medical work.

Such moments are the stuff of these "doctor stories"—the best of their kind since Dr. Anton Chekhov did his (late nineteenth-century) storytelling. As one goes through Williams' evocation of a twentieth-century American medical practice, the sheer daring of the literary effort soon enough comes to mind—the nerve he had to say what he says. These are brief talks, or accounts meant to register disappointment, frustration, confusion, perplexity; or, of course, enchantment, pleasure, excitement, strange or surprising or simple and not at all surprising satisfaction. These are stories that tell of mistakes,

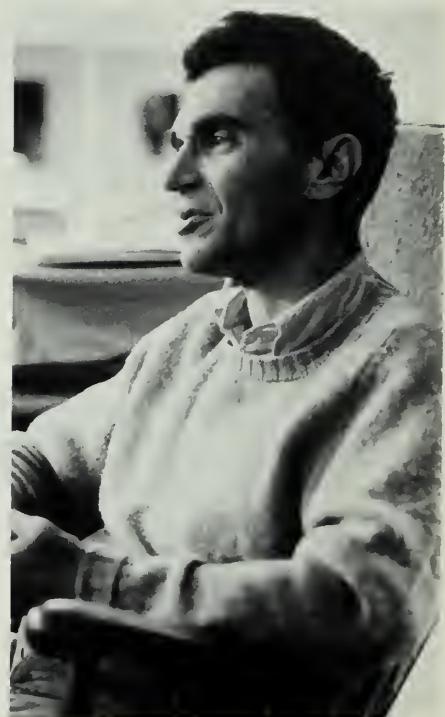
of errors of judgment; and as well, of one modest breakthrough, then another—not in research efforts of major clinical projects, but in that most important of all situations, the would-be healer face-to-face with the sufferer who half desires, half dreads the stranger's medical help. As I heard Dr. Williams once say: "Even when the patients knew me well, and trusted me a lot, I could sense their fear, their skepticism. And why not? I could sense my own worries, my own doubts!"

He has the courage to share in these stories such raw and usually unacknowledged turmoil with his readers—even as he took after himself in an almost Augustinian kind of self-scrutiny toward the end of the second book of *Paterson*. In almost every story the doctor is challenged not only by his old, familiar antagonist, disease, but that other foe whose continuing power is a given for all of us—pride in all its forms, disguises, assertions. It is this "unreflecting egoism," as George Eliot called it, which the doctor-narrator of these sto-

ries allows us to see, and so doing, naturally, we are nudged closer to ourselves. Narcissism, as we of this era have learned to call the sin of pride, knows no barriers of race or class—or of occupation or profession, either. But as ministers and doctors occasionally realize, there is a sad, inevitable irony at work in their lives—the preacher flawed in precisely the respect he denounces during his sermons, the doctor ailing even as he tries to heal others. . . .

"There's nothing like a difficult patient to show us ourselves," Williams once said to a medical student and then he expanded the observation further: "I would learn so much on my rounds, or making home visits. At times I felt like a thief because I heard words, lines, saw people and places—and used it all in my writing. I guess I've told people that, and no one's so surprised! There was something deeper going on, though—the *force* of all those encounters. I was put off guard again and again, and the result was—well, a descent into myself."

. . . These stories are, really, frank confidences extended to the rest of us by one especially knowing, dedicated physician who was willing to use his magical gifts of storytelling in a gesture of—what? We all require forgiveness, and we all hope to redeem our own missteps—hope, through whatever grace is granted us, to make every possible reparation. Words were the instrument of grace given to this one doctor,



Robert Coles

and words are the instrument of grace, also, for the rest of us, the readers who have and will come upon these marvelously provocative tales. As Dr. Williams' beloved wife Flossie (she appears now and then in these medical fictions) once said to me: "There's little in a doctor's life Bill didn't get at when he wrote." She'd been there with him, of course, all along, and she knew: the periods of irritability and impatience; the flashes of annoyance and resentment; the instance of greed, or just plain bitterness that "they" can't, don't, won't pay up; the surge of affection—even desire, lust; the assertion of power—a fierce wish to control, to tell in no uncertain terms, to win at all costs; the tiredness, the exhaustion, the despondency. The rush of it all, the fast-paced struggle, again and again, with all sorts of illnesses—and the victories over them, the defeats at their hands, and not least, the realization (postmortem) of one's limitations, one's mistakes.

For years I have been teaching these doctor stories to medical students, and during each class we all seem newly awakened—encouraged to ask the important whys, consider the perplexing ifs. The stories offer medical students and their teachers an opportunity to discuss the big things, so to speak, of the physician's life—the great unmentionables that are, yet, everyday aspects of doctoring: the prejudices we feel (and feel ashamed of), the moments of spite or malice we try to overlook, the ever loaded question of money, a matter few of us like to discuss, yet one constantly stirring us to pleasure, to bedeviling disappointment in others, in ourselves. What, in fact, that is really important has Williams left out? Nothing, it seems. He gives us a chance to discuss the alcoholic doctor, the suicidal doctor. He prompts us to examine our ambitions, our motives, our aspirations, our purposes, our worrying lapses, our grave errors, our overall worth. He gives us permission to bare our souls, to be candidly introspective, but not least, to smile at ourselves, to be grateful for the continuing opportunity we have to make recompense for our failures of omission or commission.

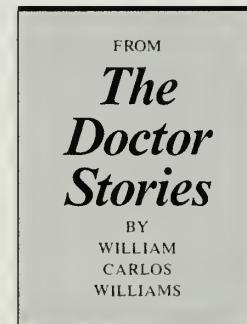
He extends to us, really, moments of a doctor's self-recognition—rendered in such a way that the particular becomes the universal, and the instantly recognizable: the function, the great advantage of all first-rate art. And not to be forgotten in this age of glib, overwrought formulations, of theories and more theories, of conceptualizations meant to explain (and explain away) anything and everything, he brings to us ironies,

paradoxes, inconsistencies, contradictions—the small vignette which opens up a world of pleasurable, startling, or forbidden mystery. . . .

On a few occasions physicians invited him to come speak at their conferences, their grand rounds, but he was shy, modest—afraid he had little to say directly to his colleagues, no matter how much he's offered the world in general through his many and varied writings. But he was dead wrong; he had everything to say to us. He opens

up the whole world, our world, to us—and so, once again, as many in New Jersey had occasion to say during the first half of this century, say and say again: thank you, Doctor Williams. □

Robert Coles, MD is a professor of psychiatry and medical humanities at HMS. He is the author of Children of Crisis, The Moral Life of Children, and The Political Life of Children. In 1973 he won a Pulitzer Prize for volumes two and three of Children of Crisis.



The Girl with a Pimply Face

One of the local druggists sent in the call: 50 Summer St., second floor, the door to the left. It's a baby they've just brought from the hospital. Pretty bad condition I should imagine. Do you want to make it? I think they've had somebody else but don't like him, he added as an afterthought.

It was half past twelve. I was just sitting down to lunch. Can't they wait till after office hours?

Oh I guess so. But they're foreigners and you know how they are. Make it as soon as you can. I guess the baby's pretty bad.

It was two-thirty when I got to the

place, over a shop in the business part of town. One of those street doors between plate glass show windows. A narrow entry with smashed mail boxes on one side and a dark stair leading straight up. I'd been to the address a number of times during the past years to see various people who had lived there.

Going up I found no bell so I rapped vigorously on the wavy-glass door-panel to the left. I knew it to be the door to the kitchen, which occupied the rear of that apartment.

Come in, said a loud childish voice.

I opened the door and saw a lank haired girl of about fifteen standing



chewing gum and eyeing me curiously from beside the kitchen table. The hair was coal black and one of her eyelids drooped a little as she spoke. Well, what do you want? she said. Boy, she was tough and no kidding but I fell for her immediately. There was that hard, straight thing about her that in itself gives an impression of excellence.

I'm the doctor, I said.

Oh, you're the doctor. The baby's inside. She looked at me. Want to see her?

Sure, that's what I came for. Where's your mother?

She's out. I don't know when she's coming back. But you can take a look at the baby if you want to.

All right. Let's see her.

She led the way into the bedroom, toward the front of the flat, one of the unlit rooms, the only windows being those in the kitchen and along the facade of the building.

There she is.

I looked on the bed and saw a small face, emaciated but quiet, unnaturally quiet, sticking out of the upper end of a tightly rolled bundle made by the rest of the baby encircled in a blue cotton blanket. The whole wasn't much larger than a good sized loaf of rye bread. Hands and everything were rolled up. Just the yellowish face showed, tightly hatted and framed around by a corner of the blanket.

What's the matter with her, I asked.

I dunno, said the girl as fresh as paint and seeming about as indifferent as though it had been no relative of hers instead of her sister. I looked at my informer very much amused and she looked back at me, chewing her gum vigorously, standing there her feet well apart. She cocked her head to one side and gave it to me straight in the eye, as much as to say, Well? I looked back at her. She had one of those small, squeezed up faces, snub nose, overhanging eyebrows, low brow and a terrible complexion, pimply and coarse.

When's your mother coming back do you *think*, I asked again.

Maybe in an hour. But maybe you'd better come some time when my father's here. He talks English. He ought to come in around five I guess.

But can't you tell me something about the baby? I hear it's been sick. Does it have a fever?

I dunno.

But has it diarrhoea, are its movements green?

Sure, she said, I guess so. It's been in the hospital but it got worse so my father brought it home today.

What are they feeding it?

A bottle. You can see that yourself. There it is.

There was a cold bottle of half finished milk lying on the coverlet the nipple end of it fallen behind the baby's head.

How old is she? It's a girl, did you say?

Yeah, it's a girl.

Your sister?

Sure. Want to examine it?

No thanks, I said. For the moment at least I had lost all interest in the baby. This young kid in charge of the house did something to me that I liked. She was just a child but nobody was putting anything over on her if she knew it, yet the real thing about her was the complete lack of the rotten smell of a liar. She wasn't in the least presumptive. Just straight.

But after all she wasn't such a child. She had breasts you knew would be like small stones to the hand, good muscular arms and fine hard legs. Her bare feet were stuck into broken down leather sandals such as you see worn by children at the beach in summer. She was heavily tanned too, wherever her skin showed. Just one of the kids you'll find loafing around the pools they have outside towns and cities everywhere these days. A tough little nut finding her own way in the world.

What's the matter with your legs? I asked. They were bare and covered with scabby sores.

Poison ivy, she answered, pulling up her skirts to show me.

Gee, but you ought to seen it two days ago. This ain't nothing. You're a doctor. What can I do for it?

Let's see, I said.

She put her leg up on a chair. It had been badly bitten by mosquitoes, as I saw the thing, but she insisted on poison ivy. She had torn at the affected places with her finger nails and that's what made it look worse.

Oh that's not so bad, I said, if you'll only leave it alone and stop scratching it.

Yeah, I know that but I can't. Scratching's the only thing makes it feel better.

What's that on your foot.

Where? looking.

That big brown spot there on the back of your foot.

Dirt I guess. Her gum chewing never stopped and her fixed defensive non-expression never changed.

Why don't you wash it?

I do. Say, what could I do for my face?

I looked at it closely. You have what they call acne, I told her. All those

blackheads and pimples you see there, well, let's see, the first thing you ought to do, I suppose is to get some good soap.

What kind of soap? Lifebuoy?

No. I'd suggest one of those cakes of Lux. Not the flakes but the cake.

Yeah, I know, she said. Three for seventeen.

Use it. Use it every morning. Bathe your face in very hot water. You know, until the skin is red from it. That's to bring the blood up to the skin. Then take a piece of ice. You have ice, haven't you?

Sure, we have ice.

Hold it in a face cloth—or whatever you have—and rub that all over your face. Do that right after you've washed it in the very hot water—before it has cooled. Rub the ice all over. And do it every day—for a month. Your skin will improve. If you like, you can take some cold cream once in a while, not much, just a little and rub that in last of all, if your face feels too dry.

Will that help me?

If you stick to it, it'll help you.

All right.

There's a lotion I could give you to use along with that. Remind me of it when I come back later. Why aren't you in school?

Agh, I'm not going any more. They can't make me. Can they?

They can try.

How can they? I know a girl thirteen that don't go and they can't make her either.

Don't you want to learn things?

I know enough already.

Going to get a job?

I got a job. Here. I been helping the Jews across the hall. They give me three fifty a week—all summer.

Good for you, I said. Think your father'll be here around five?

Guess so. He ought to be.

I'll come back then. Make it all the same call.

All right, she said, looking straight at me and chewing her gum as vigorously as ever.

Just then a little blond haired thing of about seven came in through the kitchen and walked to me looking curiously at my satchel and then at the baby.

What are you, a doctor?

See you later, I said to the older girl and went out.

At five-thirty I once more climbed the wooden stairs after passing two women at the street entrance who looked me up and down from where they were leaning on the brick wall of the building talking.

This time a woman's voice said, Come in, when I knocked on the kitchen door.

It was the mother. She was impressive, a bulky woman, growing toward fifty, in a black dress, with lank graying hair and a long seamed face. She stood by the enameled kitchen table. A younger, plumpish woman with blond hair, well cared for and in a neat house dress—as if she had dolled herself up for the occasion—was standing beside her. The small blank child was there too and the older girl, behind the others, overshadowed by her mother, the two older women at least a head taller than she. No one spoke.

Hello, I said to the girl I had been talking to earlier. She didn't answer me.

Doctor, began the mother, save my baby. She very sick. The woman spoke with a thick, heavy voice and seemed overcome with grief and apprehension. Doctor! Doctor! she all but wept.

All right, I said to cut the woman short, let's take a look at her first.

So everybody headed toward the front of the house, the mother in the lead. As they went I lagged behind to speak to the second woman, the interpreter. What happened?

The baby was not doing so well. So they took it to the hospital to see if the doctors there could help it. But it got worse. So her husband took it out this morning. It looks bad to me.

Yes, said the mother who had overheard us. Me got seven children. One daughter married. This my baby, pointing to the child on the bed. And she wiped her face with the back of her hand. This baby no do good. Me almost crazy. Don't know who can help. What doctor, I don't know. Somebody tell me take to hospital. I think maybe do some good. Five days she there. Cost me two dollar every day. Ten dollar. I no got money. And when I see my baby, she worse. She look dead. I can't leave she there. No. No. I say to everybody, no. I take she home. Doctor, you save my baby. I pay you. I pay you everything—

Wait a minute, wait a minute, I said. Then I turned to the other woman. What happened?

The baby got like a diarrhoea in the hospital. And she was all dirty when they went to see her. They got all excited—

All sore behind, broke in the mother—

The younger woman said a few words to her in some language that sounded like Russian but it didn't stop her—

No. No. I send she to hospital. And

when I see my baby like that I can't leave she there. My babies no that way. Never, she emphasized. Never! I take she home.

Take your time, I said. Take off her clothes. Everything off. This is a regular party. It's warm enough in here. Does she vomit?

She no eat. How she can vomit? said the mother.

But the other woman contradicted her. Yes, she was vomiting in the hospital, the nurse said.

It happens that this September we had been having a lot of such cases in my hospital also, an infectious diarrhoea which practically all the children got when they came in from any cause. I supposed that this was what happened to this child. No doubt it had been in a bad way before that, improper feeding, etc., etc. And then when they took it in there, for whatever had been the matter with it, the diarrhoea had developed. These things sometimes don't turn out so well. Lucky, no doubt, that they had brought it home when they did. I told them so, explaining at the same time: One nurse for ten or twenty babies, they do all they can but you can't run and change the whole ward every five minutes. But the infant looked too lifeless for that only to be the matter with it.

You want all clothes off, asked the mother again, hesitating and trying to keep the baby covered with the cotton blanket while undressing it.

Everything off, I said.

There it lay, just skin and bones with a round fleshless head at the top and the usual pot belly you find in such cases.

Look, said the mother, tilting the infant over on its right side with her big hands so that I might see the reddened buttocks. What kind of nurse that. My babies never that way.

Take your time, take your time, I told her. That's not bad. And it wasn't either. Any child with loose movements might have had the same half an hour after being cared for. Come on. Move away, I said and give me a chance. She kept hovering over the baby as if afraid I might expose it.

It had no temperature. There was no rash. The mouth was in reasonably good shape. Eyes, ears negative. The moment I put my stethoscope to the little boney chest, however, the whole thing became clear. The infant had a severe congenital heart defect, a roar when you listened over the heart that meant, to put it crudely, that she was no good, never would be.

The mother was watching me. I straightened up and looking at her told



her plainly: She's got a bad heart.

That was the sign for tears. The big woman cried while she spoke. Doctor, she pleaded in blubbering anguish, save my baby.

I'll help her, I said, but she's got a bad heart. That will never be any better. But I knew perfectly well she wouldn't pay the least attention to what I was saying.

I give you anything, she went on. I pay you. I pay you twenty dollar. Doctor, you fix my baby. You good doctor. You fix.

All right, all right, I said. What are you feeding it?

They told me and it was a ridiculous formula, unboiled besides. I regulated it properly for them and told them how to proceed to make it up. Have you got enough bottles, I asked the young girl.

Sure, we got bottles, she told me.

O.K., then go ahead.

You think you cure she? The mother with her long, tearful face was at me again, so different from her tough female fifteen-year-old.

You do what I tell you for three days, I said, and I'll come back and see how you're getting on.

Thank you, doctor, so much. I pay you. I got today no money. I pay ten dollar to hospital. They cheat me. I got no more money. I pay you Friday when my husband get pay. You save my baby.

Boy! what a woman. I couldn't get away.

She my baby, doctor. I no want to lose. Me got seven children—

Yes, you told me.

But this my baby. You understand. She very sick. You good doctor—

Oh my God! To get away from her I turned again to the kid. You better get going after more bottles before the stores close. I'll come back Friday morning.

How about that stuff for my face you were gonna give me.

That's right. Wait a minute. And I sat down on the edge of the bed to write out a prescription for some lotio alba comp. such as we use in acne. The two older women looked at me in astonishment—wondering, I suppose, how I knew the girl. I finished writing the thing and handed it to her. Sop it on your face at bedtime, I said, and let it dry on. Don't get it into your eyes.

No, I won't.

I'll see you in a couple of days, I said to them all.

Doctor! the old woman was still after me. You come back. I pay you. But all a time short. Always tomorrow come milk man. Must pay rent, must

pay coal. And no got money. Too much work. Too much wash. Too much cook. Nobody help. I don't know what's a matter. This door, doctor, this door. This house make sick. Make sick.

Do the best I can, I said as I was leaving.

The girl followed on the stairs. How much is this going to cost, she asked shrewdly holding the prescription.

Not much, I said, and then started to think. Tell them you only got half a dollar. Tell them I said that's all it's worth.

Is that right, she said.

Absolutely. Don't pay a cent more for it.

Say, you're all right, she looked at me appreciatively.

Have you got half a dollar.

Sure. Why not.

What's it all about, my wife asked me in the evening. She had heard about the case. Gee! I sure met a wonderful girl, I told her.

What! another?

Some tough baby. I'm crazy about her. Talk about straight stuff . . . And I recounted to her the sort of case it was and what I had done. The mother's an odd one too. I don't quite make her out.

Did they pay you?

No. I don't suppose they have any cash.

Going back?

Sure. Have to.

Well, I don't see why you have to do all this charity work. Now that's a case you should report to the Emergency Relief. You'll get at least two dollars a call from them.

But the father has a job, I understand. That counts me out.

What sort of a job?

I dunno. Forgot to ask.

What's the baby's name so I can put it in the book?

Damn it. I never thought to ask them that either. I think they must have told me but I can't remember it. Some kind of a Russian name—

You're the limit. Dumbbell, she laughed. Honestly—Who are they anyhow.

You know. I think it must be that family Kate was telling us about. Don't you remember. The time the little kid was playing there one afternoon after school, fell down the front steps and knocked herself senseless.

I don't recall.

Sure you do. That's the family. I get it now. Kate took the brat down there in a taxi and went up with her to see that everything was all right. Yop, that's it. The old woman took the older kid

by the hair, because she hadn't watched her sister. And what a beating she gave her. Don't you remember Kate telling us afterward. She thought the old woman was going to murder the child she screamed and threw her around so. Some old gal. You can see they're all afraid of her. What a world. I suppose the damned brat drives her cuckoo. But boy, how she clings to that baby.

The last hope, I suppose, said my wife.

Yeah, and the worst bet in the lot. There's a break for you.

She'll love it just the same.

More, usually.

Three days later I called at the flat again. Come in. This time a resonant male voice. I entered, keenly interested.

By the same kitchen table stood a short, thickset man in baggy working pants and a heavy cotton undershirt. He seemed to have the stability of a cube placed on one of its facets, a smooth, highly colored Slavic face, long black moustaches and widely separated, perfectly candid blue eyes. His black hair, glossy and profuse stood out carelessly all over his large round head. By his look he reminded me at once of his blond haired daughter, absolutely unruffled. The shoulders of an ox. You the doctor, he said. Come in.

The girl and the small child were beside him, the mother was in the bedroom.

The baby no better. Won't eat, said the man in answer to my first question.

How are its bowels?

Not so bad.

Does it vomit?

No.

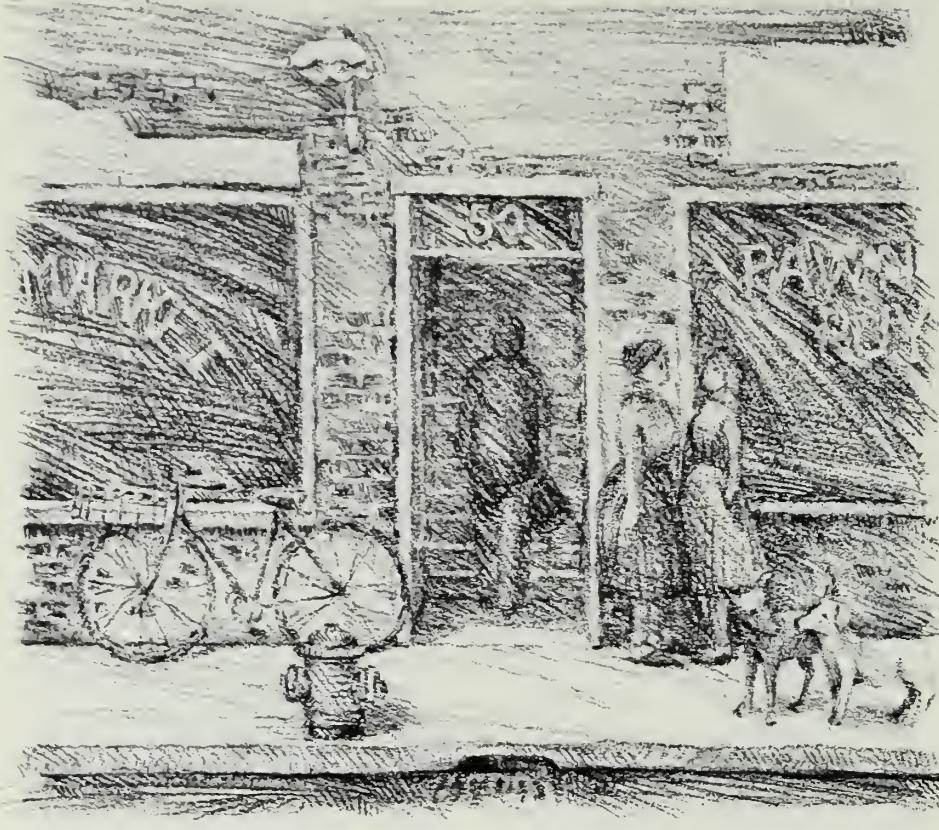
Then it is better, I objected. But by this time the mother had heard us talking and came in. She seemed worse than the last time. Absolutely inconsolable. Doctor! Doctor! she came up to me.

Somewhat irritated I put her aside and went in to the baby. Of course it was better, much better. So I told them. But the heart, naturally was the same.

How she heart? the mother pressed me eagerly. Today little better?

I started to explain things to the man who was standing back giving his wife precedence but as soon as she got the drift of what I was saying she was all over me again and the tears began to pour. There was no use my talking. Doctor, you good doctor. You do something fix my baby. And before I could move she took my left hand in both hers and kissed it through her tears. As she did so I realized finally that she had been drinking.

I turned toward the man, looking a



good bit like the sun at noonday and as indifferent, then back to the woman and I felt deeply sorry for her.

Then, not knowing why I said it nor of whom, precisely I was speaking, I felt myself choking inwardly with the words: Hell! God damn it. The sons of bitches. Why do these things have to be?

The next morning as I came into the coat room at the hospital there were several of the visiting staff standing there with their cigarettes, talking. It was about a hunting dog belonging to one of the doctors. It had come down with distemper and seemed likely to die.

I called up half a dozen vets around here, one of them was saying, I even called up the one in your town, he added turning to me as I came in. And do you know how much they wanted to charge me for giving the serum to that animal?

Nobody answered.

They had the nerve to want to charge me five dollars a shot for it. Can you beat that? Five dollars a shot.

Did you give them the job, someone spoke up facetiously.

Did I? I should say I did not, the first answered. But can you beat that. Why we're nothing but a lot of slop-heels compared to those guys. We deserve to starve.

Get it out of them, someone rasped, kidding. That's the stuff.

Then the original speaker went on, buttonholing me as some of the others faded from the room. Did you ever see practice so rotten. By the way, I was called over to your town about a week ago to see a kid I delivered up here during the summer. Do you know anything about the case?

I probably got them on my list, I said. Russians?

Yeah, I thought as much. Has a job as a road worker or something. Said they couldn't pay me. Well, I took the trouble of going up to your court house and finding out what he was getting. Eighteen dollars a week. Just the type. And they had the nerve to tell me they couldn't pay me.

She told me ten.

She's a liar.

Natural maternal instinct, I guess.

Whisky appetite, if you should ask me.

Same thing.

O.K. buddy. Only I'm telling you. And did I tell *them*. They'll never call me down there again, believe me. I had that much satisfaction out of them anyway. You make 'em pay you. Don't you do anything for them unless they do. He's paid by the county. I tell you if I had taxes to pay down there I'd go and take it out of his salary.

You and how many others?

Say, they're bad actors, that crew. Do you know what they really do with their money? Whisky. Now I'm telling you. That old woman is the slickest customer you ever saw. She's drunk all the time. Didn't you notice it?

Not while I was there.

Don't you let them put any of that sympathy game over on you. Why they tell me she leaves that baby lying on the bed all day long screaming its lungs out until the neighbors complain to the police about it. I'm not lying to you.

Yeah, the old skat's got nerves, you can see that. I can imagine she's a bugger when she gets going.

But what about the young girl, I asked weakly. She seems like a pretty straight kid.

My confrere let out a wild howl. That thing! You mean that pimply faced little bitch. Say, if I had my way I'd run her out of the town tomorrow morning. There's about a dozen wise guys on her trail every night in the week. Ask the cops. Just ask them. They know. Only nobody wants to bring in a complaint. They say you'll stumble over her on the roof, behind the stairs anytime at all. Boy, they sure took you in.

Yes, I suppose they did, I said.

But the old woman's the ringleader. She's got the brains. Take my advice and make them pay.

The last time I went I heard the, Come in! from the front of the house. The fifteen-year-old was in there at the window in a rocking chair with the tightly wrapped baby in her arms. She got up. Her legs were bare to the hips. A powerful little animal.

What are you doing? Going swimming? I asked.

Naw, that's my gym suit. What the kids wear for Physical Training in school.

How's the baby?

She's all right.

Do you mean it?

Sure, she eats fine now.

Tell your mother to bring it to the office some day so I can weigh it. The food'll need increasing in another week or two anyway.

I'll tell her.

How's your face?

Gettin' better.

My God, it is, I said. And it was much better. Going back to school now?

Yeah, I had tuh. □

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FROM THE

AIDS

FRONTLINE

Keeping Hope Alive

by Jerome E. Groopman

I am generally punctual in writing manuscripts. Scientific articles on research from our laboratory, clinical studies and reviews are generated with the appropriate degree of effort. Such work is the usual structure of communication within the academic medical community. Why then was it so difficult to write this article?

I was asked to describe how a physician provides hope for people with AIDS. Because I was part of the group that cared for the first cases of AIDS in California in 1980, it was believed by the editors of this magazine that I could communicate a personal, historical, and hopefully inspirational perspective.

I was asked how I cope with the deaths of so many young and often talented and creative people. How do I maintain my energy and determination during an epidemic that must at times appear overpowering? How do I compartmentalize the pain and suffering I see on a daily basis and not allow it to invade and potentially destroy the pleasures of my life with my wife, children and friends? How do I integrate the intellectual pleasure of challenging laboratory research on a virus while watching the virus destroy human life?

In writing this article, do I dare be honest, personal and direct? And if I attempt to communicate both the pain

and joy of a research physician caring for AIDS patients, do I have the understanding and the prose to describe an epidemic of such complex dimensions?

AIDS is a disease marked by profound suffering. The patient passes through a succession of events from the time infection with the virus is first recognized. Initially, there is psychological, emotional and social upheaval—knowing that although there is treatment there is not yet a cure, and that friends, family, fellow workers and community may have a range of reactions from abandonment to sympathy, blame to anger, disinterest to fear.

People with AIDS feel as though they are in a race against the virus, hoping and believing that mobilization of scientific technology and medical compassion will change the course of an illness that will terminate life prematurely. There is fear—they may have had friends who died of AIDS or have seen television programs on AIDS, and witnessed the awful deterioration of mind and body, the debilitating infections and development of malignancy.

AIDS allows the physician to witness the most noble and powerful part of the human being—the ability to endure suffering and to sustain the will to live.

There may be guilt if they got the virus from sex or drugs, or anger if it came from contaminated blood. They worry that, despite front page reports touting breakthroughs and progress, they may not live to see these research findings realized as clinical treatment. And even if such treatments are developed, legal and logistic constraints could result in being ineligible to receive them.

The physician caring for people with AIDS is the focal point of such complex emotions. He or she must work within an often frustrating structure to obtain experimental drugs for desperate people. Moreover, the physician must reach as deeply as possible into the soul, and mobilize the energy and belief that, in the face of AIDS, life may be sustained, that this disease can be treated.

The physician must give that energy and belief to the person with AIDS. This process is enervating, frustrating, depressing, and at times surreal. Yet it allows the physician to witness, not as an observer but as a participant, the most noble and powerful part of the human being—the ability to endure suffering and to sustain the will to live.

I come from a long tradition of suffering, hope and determination. In the Jewish consciousness, there is a cultural memory that on a yearly basis recounts events more than two millennia old. During the Passover seder, we recall the suffering of slavery in Egypt as though it were our own, and in the course of the seder evening move from despair to hope, from bondage to freedom. We learn from this experience to give food to the hungry, to clothe the naked, to relieve the oppressed, and to be kind to the stranger, for we were once strangers in a strange land.

Distilled from this, we know that we must reach out beyond ourselves to those who are different. We must not discriminate, or judge, or give in to the perverse side of human nature that inhibits compassion because of igno-

rance or cultural or social differences. We as Jews suffered because we were different. During the Middle Ages, Jews were accused of generating the great plague, of contaminating wells, of infecting our neighbors. These accusations led to our isolation in ghettos.

Our cultural memory is both ancient and recent. My immediate family was fortunate enough to leave Europe before the Nazis came to power. The extended family that remained behind largely perished in the concentration camps. Those who survived did so for reasons neither they nor their potential murderers could understand. Because of AIDS, the experiences of these Jews have often entered my thoughts.

Yet, I am afraid to make analogies between the Holocaust and other events. I fear that such comparisons could trivialize that almost incomprehensible but very real period of mass death in Europe. Though I hesitate to make the AIDS epidemic a holocaust metaphor, there are insights that I have derived from family and friends who endured and survived, who resisted despite no apparent chance, and who taught me by their survival that there are strengths within people beyond our imagination.

I believe that if Jews—who were told they were strange, different and even subhuman, who were driven from their homes into camps, divided from their families, starved and beaten, who had no apparent reason for hope, no reason to fight—could endure and survive, then there is a reason for others to fight and believe they may survive. I may be wrong, but there is no other way.

There are many clear differences between the AIDS epidemic and the Holocaust. These differences are important and include a society that is now altering its structure to care for people with AIDS, to mobilize medical and other resources to expand research and protect civil rights. It would be absurd and terribly wrong to force the analogy. But what we may do, and what I have done, to cope with this sea of death of so many young, creative and attractive people, is to draw on the strengths

that were given me by my parents and my tradition.

In caring for AIDS patients, I was at first a stranger in a strange land. They are infected and I am not infected. They are usually homosexual and I am heterosexual. They have often used recreational drugs and I have never used drugs. They may have an alienated or angry family, lover and the additional pain of not having children, and I have a strong and supportive spouse and healthy and exuberant children. Yet, despite all these differences, there are no real barriers that block me from reaching out, making contact and fighting together. This is my tradition, and I have now applied it to a situation that I would have never imagined or predicted.

I sustain hope in myself and in my patients by being realistic, honest and determined. We are partners in a struggle, we work and decide together what form of treatment to undertake, what decisions to make. We discuss the disease and its significance for family, friends and work.

Perhaps some of you will dismiss this as the psychological mechanism for dealing with suffering and pain that religion or tradition, as the opiate of a physician, affords. But somehow I sense that this is what keeps us going and this is what keeps hope alive. It need not be cast in such traditional or individual terms, but I can speak from no other point of intimate reference. I can speak only from myself.

I can also assert that I have unresolved questions, issues that are still unsettled. The laboratory is an exciting and productive environment, the biology of the virus, extraordinary in its complexity and challenge. There is excitement and indeed pleasure in experimental discovery, and academic advancement and social appreciation that result from scientific productivity.

But the reason for doing this cannot be lost or made secondary. The basis is ultimately to change the course of an epidemic that has the stark face of suffering and death. The enormity of the problem is such that the struggle

AIDS was seen from the very first as a disease of "others" and by and large of politically excluded others.

must be enlarged, that the burden of work must be shared, and that fresh and creative scientific minds must be recruited.

I would ask only that people look into themselves and see how much there is—how much substance and strength—that could be focused in the laboratory or at the bedside. I would encourage them to ask if they could overcome the

strangeness and alienation they may feel and extend themselves to people in tremendous need. □

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night. All I could think of was that I loved this man, that he needed my support, and that I was afraid. As I walked down the hospital corridor, I knew that I had to take him in my arms and kiss him—to affirm my support and promise my alliance—and I was terrified. At the time, we knew almost nothing of HIV (not discovered until a year later) and its transmission. We had only the guidelines of our humanity. I followed these. I hugged him and kissed him and in those moments, transformed my life.

In August I had a chance to meet Michael Gottlieb, MD, one of the original observers of AIDS. I asked Gottlieb how I could contribute. It seemed to me that I was too old to learn enough molecular virology or immunology to do meaningful research. Neither field had existed when I was in medical school. I couldn't imagine how I could provide clinical care after 29 years in the laboratory and classroom. I believe Gottlieb thought he was being realistic when he said, "Novick, stick to the bats. We'll take care of this."

Paradoxically, that was my second moment of revelation. I had identified my national emergency. I knew that I could not "stick to the bats." I knew with a clarity that I have rarely otherwise experienced that I would focus my assets—my medical training, my years of experience as a behavioral biologist and as a teacher, and my maturity and concern—on this problem, AIDS. I felt compelled to invade the vacuum of indifference and inattention and to find a way to chew at the boundaries of our ignorance. When I look back now, I wonder if Harvard helped me to feel that secure, that daring, and that arrogant.

In September, on the day I retired my laboratory, I discussed the total alteration of my research mission with the president of Yale. Then I called James Curran, MD, head of the AIDS Activity at the Centers for Disease Control, a total stranger to me, to ask for help in identifying a niche I could occupy productively.

A Personal Imperative

by Alvin Novick

In 1953, after completing two years of training in internal medicine at Beth Israel Hospital, I decided to explore a career in medical research. By a series of largely chance events, I emerged from the tunnel of training in research as a physiologist of behavior and as a biologist. More specifically I had become a student of the natural sonar system of bats, and pursued that subject at Yale as a biology professor for more than 25 years. I loved the academic life. I loved teaching and advising, and I enjoyed pursuing research questions in an exceptionally esoteric field.

During all of those years, 1951 to 1982, my family and friends wondered why I had "given up" medicine for such a seemingly sheltered life. In truth, I never felt I had given it up and often spoke of returning to practice in the conventional sense in a national emergency.

In 1981 we had the first glimmerings of what we now call AIDS. It was startling—a new, devastating, seemingly infectious, probably sexually transmit-

ted disease of young men. By the summer of 1982 AIDS had riveted my attention. We were obviously confronting an epidemic.

The numbers were growing; the complexity of the syndrome, the horror of the clinical course, and the epidemiology of AIDS were fascinating and compelling to me. Yet I could perceive almost no response—almost no commitment of energy, brilliance, funding or concern—on the part of medical scientists or public leaders. AIDS was seen from the very first as a disease of "others" and, as we all now know, a disease by and large of politically excluded others.

On July 30, 1982, one of my best friends, Jim, a New York law professor, called to say he had been diagnosed with Kaposi's sarcoma. As I drove to the city to be with him the next evening, I was consumed with horror, anguish, compassion and fear. I've now lived with those four emotions full time for six years, but they've expanded into a far broader array of nuances than I would have been able to anticipate that

I learned more about living and joy, and dying and sorrow, than I had ever wished to know.

During the next year, three major themes occupied my life. First, with Curran's help I developed my knowledge of epidemiology and began a behavioral epidemiological study of gay men with AIDS at a major New York hospital. I learned profound lessons about the folly of invading the territories of medical scientists (even unoccupied territories) and I withdrew very bloodied, but well informed about AIDS, in January 1983. Second, I worked closely with the gay, politically aware community of New York to develop the network of allies I would need to gain convincing access to control subjects. I entered as an observer and emerged as an advocate.

And third, I and a team of three other committed friends took care of Jim until his death in January 1983. I discovered new dimensions to taking care of a living and of a dying friend, not particularly as a patient but as a person. I learned more about living and joy and dying and sorrow than I had ever wished to know, but I was enriched almost beyond analysis by the experience. Jim's ashes are scattered on a wooded knoll behind my house. His presence and my memories are a source of my strength.

In June 1983 I returned to New Haven, enriched and depleted, angry and frustrated, but driven more than ever to batter down the wall of indifference, which by now I recognized to be grounded on bigotry. I had found my niche—vacant and waiting—and what a complex niche it has turned out to be.

On one side it's academic. That anchors me. I have taught myself the basics of biomedical ethics and have become a spokesperson in the realm I call applied medical ethics. I have developed a personal voice in this field. My analyses are openly and consciously driven by my advocacy for persons with AIDS or those vulnerable to HIV infection. The range of intriguing issues is wide—confidentiality, informed consent, the doctor-patient relationship, the ethics of drug and vaccine trial design, non-traditional care, the responsibili-

ties of HIV infected persons, and the reciprocal responsibilities of society.

The other end of the niche I've occupied is non-academic. I advocate for everyone at risk—men who have sex with men, I.V. drug users and their sex partners and children, men and women in the sex industry and their clients, minority persons, blood transfusion recipients (and donors, too, though they are not at risk), people with hemophilia, youth and especially street kids, and all others who need a spokesperson. This realm has academic underpinnings, too. I have been particularly interested in analyzing how a virus could so effectively infect, almost exclusively, people with truncated civil rights. To my knowledge no other disease has ever been so peculiarly selective.

I have always been on the tolerant end of the spectrum of attitudes towards others, but AIDS has polarized me. I've come to see that tolerance is patronizing. Respect is our appropriate goal.

I quickly discovered how filled with hate and disdain our nation is and how quick to distance itself. The world I work in reverberates with references to the "recalcitrant," the "culpable," the "non-compliant," the "self-destructive losers," and "scum." Behind these words are deeply and sincerely felt bigotries. Even nice people refer to "innocent" victims, as if anyone is "guilty" of hosting an infectious organism.

Once you discover how much the setting of AIDS is defined by such profound inhumanity, advocacy becomes a joyous crusade. The battles are endless. The enemy ranks are so diverse. I have tried to use my skills as a teacher to catalyze sensitivity, concern and loving-kindness in medical students, residents, nurses and social workers, public health professionals, ministers and priests, sheriffs, probation and parole officers, corrections officials, teachers, lawyers, public officials, parents and the general public. Sometimes I succeed. I love my catalyst days. I find it startling that in 1988 it is still novel to help people move toward respectful

concern for fellow Americans.

In between these two realms of ethics and advocacy is the vast territory of public policy development. I have been a significant player in this arena at the federal, state and local levels because I represent the uncommon combination of academic scientist, physician and ethicist/advocate. I have fought to occupy this niche—and it has paid off.

I cannot count the hours I've spent on such issues as testing, confidentiality, anti-discrimination, contact notification, the duties to care and to warn, health care planning, drug treatment planning, homes for the homeless, access to home-based, community-based and long-term care, access to drugs and drug trials, and all of the other challenges of AIDS public policy. No one can do these things without some institutional credentials. Mine have been principally as president and board member of the American Association of Physicians for Human Rights and chairman of the Mayor's Task Force on AIDS in New Haven.

We may sometimes think that each of us alone has at best a very tenuous effect on public policy in such a large and diverse nation. That need not be true. I call it the "smoke and mirror" effect. If one is brazen and determined, if one is articulate and energetic, it's amazing how much each of us can do. There are perhaps dozens of public policy activists—some on the side of punishment and others on the side of health promotion and compassionate care. The reason one can have a significant impact is that most of our elected and appointed officials are bogged down in a quagmire of bureaucracy and timidity. Many are still ignorant of the issues. Energy and helpful information work wonders.

Three years ago, over coffee with a federal epidemiologist, I discovered the White House had formally ordered that every time I was invited to a federal meeting in a consulting role, the sponsors were required to invite a counterpart from a short list of "politically reliable" conservatives. I treasure this as my favorite credential. I actually

I work with these people.... They are all part of my life. They are not "others" to me.

identified my balancing counterpart only once. We had been invited to a small working conference at the Centers for Disease Control on health education needs surrounding AIDS. The atmosphere was sincerely professional. Everyone shared the common goal of liberating the necessary forces to accomplish risk reduction through safer sex and safer drug-use practices.

When we were leaving my conservative colleague came over to me, wrung my hand, and spoke warmly about how well we had interacted. I believe he was correct. I've found over and over again that sincere people, whatever their political agenda, routinely reach what I call a "professional solution" regarding AIDS, provided only that an informed dialogue is allowed.

But I'm neglecting the human side. How does one stay connected with the grass roots of need and with the realities of a devastating epidemic? Some of that's been thrust on me and some perhaps I've chosen.

At least 30 personal friends and acquaintances are dead of AIDS. Some I had known for years; others were co-fighters in the cause, fellow volunteers, heroes and heroines, and not always visible to the world at large. Some were my students, some my colleagues—physicians, scientists, professors. Some were sewn into my life. Some were gay; some were drug users. One was a transvestite prostitute. Some have been infants. I cannot yet begin to inventory how much I have learned from each one of these remarkable people. The principal lesson has been to marvel at their beauty, their strength and their dignity.

At least an equal number of my friends and acquaintances are HIV-infected and they share with me their fears and anxieties, their commitment and power (many are also advocates and fighters).

I work with these people. I consult with them. I sit with them on committees and task forces. They are guests in

my home. I meet them at the beach and at concerts. Three of them are my HIV-infected god-children—sweet, innocent and joyous. They are all part of my life. They are not "others" to me.

AIDS is no longer exotic. It is not somewhere else. I no longer understand why people would want to distance themselves, deny health care, irrationally fear infection, or impose hatred and punishment on those who are so viable and vibrant.

Intertwined with the ethics and public policy of AIDS and with persons with AIDS, my life is fulfilling and enriching—the more so because I am needed and I can do so much. I can love my friends, praise and honor my heroic co-workers, and bounce my god-children on my knee. Above all, I can defend their rights and attempt to open the hearts and minds of other Americans to their needs.

Hopelessness and helplessness are the most constant threats to compassionate care and to advocacy and rational public policy development. We had by 1981 long drifted away from the art of medicine in patient care. We are rediscovering those rich resources. But we need inspiring role models to transmit these rusty skills to medical students, residents and young clinicians.

Role models are, of course, a tradition in our profession, but at the moment they are being held in check or overshadowed by the fearful, the hostile, the arrogant, and the automatons of technology. We have to release and honor the pent up compassion of our colleagues.

We also must not succumb to hopelessness and helplessness in our human relations with friends and colleagues who are ill. We need to help them more forcefully express and expand their lives.

I discovered the range of opportunities to expand both our lives during the months I helped care for Jim. My experience has been repeated and expanded many fold since then. I remember when Jim was on an experimental protocol involving interferon. We celebrated his apparent improvement with

a fall-foliage weekend trip through Vermont and New Hampshire. We had fun and we felt good. By Thanksgiving, Jim was hospitalized and too weak to walk. We carried him home for the day for a wonderful dinner that he couldn't in fact even eat. But it was good.

We carried him home again for an early Christmas, a pretend event, because we never thought he would survive until the real one. He no longer had any properly functioning organ systems. But he thought otherwise and wished to celebrate not only real Christmas but also New Year's Eve with his friends. Moving him from the hospital by then seemed unthinkable, so he organized two highly successful parties by his bedside. He died a few minutes past midnight on January 1st, after everyone had gone home.

In public policy, I suppose we face the greatest threat of hopelessness and helplessness. It sometimes appears that society is so sincerely homophobic, so disrespectful of I.V. drug users, so ready to blame the victims, that we will be unable to mount rational programs to stop and contain the epidemic. Responding to that combination of bigotry-based resistance and denial permeates my life. How can we overcome so much ignorant and imbedded hatred, so much institutionalized and encompassing disrespect?

I now know the answer: with commitment, hard work, good humor, dedication, example and fervor. Social attitudes will yield in time. At the personal level burn-out lurks around the bend. Burn-out is a synonym for hopelessness and helplessness. We must keep it away by using our strength and our skills to help our patients, our friends and society. □

Alvin Novick '51 is a professor of biology at Yale University. There he had pursued research on the sonar system of bats, until 1982, when he began concentrating on the social, ethical and public policy aspects of AIDS. He currently plans to write a personal history of the AIDS epidemic.

Rites of Residency



New Age Stresses on the Iron Intern

by Ellen Barlow

Some physicians say it's about time the resident training process was scrutinized. Changes in health care delivery have left residents with more of the stresses and fewer of the pleasures of patient care. Others say, why tinker with success. Has the iron intern of the past turned into a wimpy alloy?

There are academicians, however, who have been concerned for some time about the increased stress on house officers in this era of economic restraints and short, intense lengths-of-stay. New York's legislative reaction to the much-publicized Libby Zion case has spurred on debate, particularly in California and Massachusetts, where the possibility of a legislative reaction looms. No other state may go as far as New York and regulate residency

hours and supervision—traditionally the domain of each individual hospital—but all eyes will be on New York in July 1989 when changes go into effect.

If they can go into effect by then. As many observers point out, the real stumbling block is dollars and cents. There are problems with the residency training system, but where will the money and personnel for solutions come from?

During the past year, Harvard and the other Massachusetts medical schools have attempted to reconcile opposing viewpoints on what needs or does not need to be done. Impetus came from a bill almost proposed in 1987 to the Massachusetts state legislature by Senator Lois Pines that would have allowed the state government to control resident work hours. She withdrew her bill



to give the Massachusetts medical community a chance to come up with its own solution.

In October 1988 a state-wide Coordinating Committee on House Staff Training Issues, chaired by Richard H. Egdahl '50, presented its guidelines to interested legislators on house staff monitoring and clinical training conditions. In addition to faculty and house officers from the four Massachusetts medical centers, the committee comprises representatives from the state's Board of Registration and Medicine, the Department of Public Health, and the Massachusetts Medical Society and Hospital Association.

"Our job was to get hell from the right and the left—the program directors and the resident unions—but to understand thoroughly their positions," says Egdahl, who is director of Boston University's Medical Center. "There was a lot of discussion, disagreement and compromise among the committee members."

The coordinating committee established provisional guidelines for institutional overview, monitoring, and hours and tasks. For example, pertaining to hours and tasks, they suggested (and the bold is their's):

- **At least one period of 24 consecutive hours off per week, or 48 consecutive hours off for two weeks, except under unusual circumstances.**

- Generally not more than one out of three in-house nights on active call, although exceptions may be made on certain rotations.

- **After 24 hours of continuous clinical activity on active medical or surgical services or intensive care units, a period of several hours' rest or, at least, cessation of active duty involving major patient care responsibility. The resident may continue beyond the assigned hours for periods of time that are needed in order to transfer information to other residents for continuity of patient care, or to attend rounds and conferences. Occasional exceptions may be required for varying patient care loads or emergencies but not as a matter of routine.**

- **Not more than 80 hours of active patient care responsibility per week, averaged over a four-week period.**

- Because these guidelines relate to all clinical activities during the years of house staff training, it is recommended that any "moonlighting" activities will conform with the guidelines.

- Generally, **not more than 12 consecutive hours in a busy emergency unit.**

- Actively explore: **alterations in the scheduling of current personnel (e.g.,**



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a night float in busy PGY-1 medicine and surgery rotations), whether through re-assigned house staff, changes in service rotations, deployment of fellows or other MDs; **substitution of other clinical personnel** such as nurse practitioners or physician assistants; and the establishment of "non-teaching" services to alter workloads for existing house staff.

• **Increased use of non-physicians for tasks, both clinical and administrative, not requiring a physician** (phlebotomists, IV technicians, transporters, etc.)

The committee also proposed that each hospital have its own committee to monitor house staff schedules, performance, issues and problems. Those committees would report annually to the coordinating committee, which in turn would share information with appropriate governmental bodies.

"We purposely used some vague language to avoid the rigidity mandated in New York," says Egdahl. "With the range of opinions on the committee, it was the only way to compromise at times; for example, to say "busy" to qualify emergency room but then not precisely define busy."

It remains to be seen whether the

resulting guidelines will indeed completely satisfy anybody. Although all concerned parties at the legislative briefing seemed to think the report was a good first step, "A couple of the legislators were concerned about the non-specific language," says Stephanie Fidel, external affairs director at HMS. "They were concerned that there were no 'teeth', no effective mechanisms to ensure the guidelines are followed." These concerns were strongly expressed by Boston and Cambridge City Hospitals' house staff unions. A resident consortium of the Massachusetts Medical Association also pointed to the report's "looseness," but stated that they did not want to see hours and supervision regulated.

Others may feel the guidelines are too restrictive. The deans of the Massachusetts medical schools and the heads of the teaching hospitals still have to support them if they are to work. "I anticipate a similar give and take process in meeting with the deans and hospital CEOs," says Egdahl. "Everyone realizes that even if we come up with a solution, we still have to sell it to many groups. If we don't, there will be a constricting bill. I think we have good arguments to stop it, if we take the first steps and keep moving forward."

The medical centers want to avoid legislation because, "For one thing legislation is static and the world of medicine is changing," points out Mitchell T. Rabkin '55, president of Beth Israel Hospital and a member of the coordinating committee. "We thought self-examination would be a better way to encourage change. We want to work in a public-private partnership to keep public officials informed, aware of costs and of what can be done to accommodate the recommendations." He also points out that the guidelines can't be too specific because residency requirements differ by specialty, by year, and by hospital.

What prompted all this activity? For as the coordinating committee report states, "House staff performance and clinical training conditions are only one set of components of the many complex elements determining the quality of clinical care."

Libby Zion's death in New York was the spotlight. And, says Egdahl, "It was a visible issue that appealed to the heart strings."

To recap briefly what happened: In March 1984, at the suggestion of her family physician, 18-year-old Libby Zion was brought to the emergency department of New York Hospital with a high fever; after a series of clinical judg-

ments and actions, she was dead by the next morning. Her father, a lawyer and journalist, pushed for a grand jury investigation, which didn't indict the hospital or the physicians involved, but did blame the "systemic nature of the problem," including residents' inadequate supervision and excessive hours on duty.

David Axelrod '60, commissioner of the New York State Department of Health, appointed a committee of nine physicians headed by Bertrand Bell, which recommended changes that are now part of the state's code of regulations. For example, there are very specific limits on consecutive work hours (in the emergency room, 12 hours; 24 hours on the wards), with at least 8 hours off between shifts; no more than 80 hours total per week, averaged over four weeks; a mandated 24-hour supervision by experienced physicians; and a requirement that all hospitals have continuous 24-hour/7-day per week coverage in i.v. services, phlebotomy and patient transport.

Although most admit that the impact of sleep deprivation should be looked into further, there is disagreement as to whether it actually affects a resident's performance. As a paper entitled "Sleep Deprivation and Resident Performance" in the September 23/30, 1988 *JAMA* opened: "While it is well known that prolonged sleep deprivation can adversely affect cognitive function and may induce behavioral and biochemical alterations, it is not clear that the loss of sleep engendered by usual hospital call schedules has such deleterious effects on house-staff performance." This study did not find that overall cognitive or motor performance of surgical residents was affected by sleep deprivation, although other studies have found information-processing impairments. There is not yet a definitive study.

"The episode in New York that triggered all this was probably not the result of an overworked house officer so much as misjudgments on the part of junior, senior and attending physicians, and nurses," argues Rabkin. "It is an example of how redundancy procedures built into a teaching hospital are not fail safe. When an unlikely sequence of misjudgments take place, trouble can happen."

Rabkin says he has been concerned for some time about the effects on the residency experience of changes in inpatient utilization patterns. "In my days as a house officer, it was a heavy load to admit three or four patients in one day. Now five or six admissions is the mode. The pace and intensity

necessary tests, and had time later that evening to review anatomy and surgical technique for the procedure. The patient was followed through surgery and recovery, enabling the resident to develop a sense of how to prepare patients for the total experience, in addition to learning surgical technique.

But today the patient's work-up is done by the senior surgeon in his or her office; so the resident sees the patient for the first time the morning of surgery or maybe even in the operating room, perhaps already anesthetized. That patient may even be draped so that only the surgical field is exposed. The patient won't be alert enough to talk to until the next morning and may go home that day.

"The in-hospital experience has been dramatically foreshortened so it is hard for the resident to know and appreciate the early symptoms of an illness and the effects of treatment at the other end of its course," says Rabkin.

Third-party payers claim to support medical education, he says, but are failing to support services that would relieve the pressures on house officers that detract from that education. Third-party-payer reimbursements do not cover full usage of ancillary services, so most hospitals have cut back on evening and night services.

Such cutbacks in these belt-tightening days of cost containment have caused one of the least disputed issues about residency training: Residents often get stuck with too much "scut" work. The amount of scut varies from hospital to hospital, ranging to what people have described as virtual "slave labor" in some of New York's municipal hospitals. Because there are no ancillary services in some hospitals at night, a resident may be awakened when on call to transport a patient or draw blood.

Another source of stress for today's residents is the ethical component of decision making, cites Ronald Arky, HMS Charles S. Davidson Professor of Medicine and chief of medicine at Mt. Auburn Hospital. "I've had the opportunity during the last 28 years to watch a great change in demands on the house staff. When I was a house officer, people died and weren't resuscitated because we couldn't do anything for them. I am convinced that a major cause of stress these days is that we throw house officers into difficult life and death decisions that require a lot of discussion and agonizing."

Through the years Arky has observed other changes: new admissions to the hospital have doubled in the past 10

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has created problems in work load, which leaves less time for educational sessions—conferences or reading—even with time savers, such as computer literature searches."

Patients who are less sick are treated on an ambulatory basis, and for those hospitalized, there are economic pressures to discharge quicker. Six years ago in the *New England Journal of Medicine*, Rabkin wrote: "Which days have we cut from the hospital experience? Not the days of anxiety but the days of gratification! We have sent home the patient who was approaching that exquisite moment in hospitalization when anxiety about an indeterminate outcome and fear of dire complications shade first into hope and then into certainty of success." The result is a change in what he calls the SAG index: the sense of anxiety versus gratification (SAG) has sharply increased.

The quality of the educational experience has also been affected. Rabkin compares the way elective surgery for a thyroid nodule used to be handled by a resident versus how it proceeds today. In yesteryear, the patient was admitted a day before surgery; the surgical resident then had a chance to examine and talk to the patient, order and see any

years, intensity of illness has increased, the number of technicians and nurses have been cut back for financial reasons, applications to internal medicine have been down 25 percent nationally over a five-year period, and there is less mentoring because attendings are devoting more time to patients in faculty group practices.

"In our medical residents I was observing fatigue, depression, attitude changes and divorces," he says. "By December or January of their first year, residents were downright derogatory to patients at times."

So in 1986 when Arky was voted chairman of the HMS Faculty Council, he picked up on a proposal to study residency issues that had been first presented to the council a year earlier by Leon Eisenberg, the Presley Professor of Social Medicine. The dean named Arky head of an ad-hoc committee on stress and fatigue in residency training. Committee members conducted group interviews with all Harvard-affiliated internal medicine and pediatric (not surgery) house officers and released a report in the fall of 1987. The residents' comments reflected the diversity of the programs, Arky explains, but also had common themes.

"The word dehumanizing was used time after time to describe their experience," says Arky. "Also cited was the lack of meaningful exchange with attendings or teaching faculty. For example, someone commented that she didn't mind being up all night caring for Ms. X, pumping blood, monitoring her heart, giving meds, if only the attending the next day would say thanks instead of always, 'Why didn't you do this?'"

The committee made some initial recommendations; one that Arky feels has worked well for medical residents at Mt. Auburn and other hospitals is a night float system. A fresh house officer comes on and handles any new admissions after, say, midnight. The house officer who's on call that night may still be up all night, but does not have the further strain of new admissions, who at night are often very sick and need a lot of attention. "You can argue about continuity of care," says Arky, "but if I had to weigh someone so tired he or she cannot make rational decisions on a scale against continuity, I'd say do anything to avoid someone that fatigued."

Surgeons, on the other hand, argue that continuity of care is critical for quality patient care and for resident education. They say it is lack of familiarity with a patient, not fatigue, that is

different requirements, and therefore I believe it is something best handled by directors of residency programs."

Joseph Murray '43B, former chief of plastic surgery at Brigham and Women's and Children's Hospital, and HMS professor, *emeritus*, was a resident when house officers literally resided in the hospital. "Being in the hospital was the fulfillment of my life. Nights on or off made no difference to me, because even on my days off, I went down to the emergency room or the operating room to see what was happening."

While still a resident, he got married and had two children, and he admits his schedule was hard on his family. "Maybe we did try to think of ourselves as iron men, or iron persons, but I still believe it didn't do us much harm."

Although he says that the residency training system is a time-proven way to train physicians and surgeons, he thinks that the Libby Zion case brought out some issues that need discussion. "Events like the Libby Zion case are infrequent, but even once is too much. But you just can't change things by fiat. Like the Prohibition, you can't stop drinking by law. You can, however, provide guidelines for the chiefs of services and a method of redress for residents."

After the Arky committee report was presented to the Faculty Council, Dean Tosteson appointed Eugene Braunwald chairman of an HMS task force on graduate medical education to survey Harvard-affiliated residents across all services. They sent questionnaires to 1,459 residents and received 830 responses. They also surveyed 76 training program directors.

Results showed, says Rabkin (who was also on the Braunwald task force), that house officers felt that, yes, they were tired because of their demanding schedules. They had made no major errors because of it, but some felt that sleep deprivation could occasionally interfere with optimum patient care. Many also indicated that the addition of ancillary personnel could free them from the increasing non-medical, especially clerical, tasks.

"Each hospital will now be encouraged to set up a committee for monitoring residency issues on a regular basis and keeping its board of trustees informed," says Rabkin. "Also, the survey results will be distributed internally, so each hospital can establish its own specific guidelines. Similarly, responses on surgery at all hospitals may be taken up at an HMS department of surgery executive committee meeting. The survey also turned up things like

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what was happening."*

□

a source of errors in judgment.

"I am concerned with anything that mandates rigid hour requirements and limits," says W. Gerald Austen '55, Edward D. Churchill Professor of Surgery and chief of surgery at Massachusetts General Hospital. "The best patient care requires continuity of care. It always has been and always will be one of the most important aspects to delivering quality care." Austen says that if he were a patient who had had an operation at 8 a.m., he'd want the surgeon who did the operation to be there at 11 p.m. to make decisions and do the right thing if there were a serious problem.

"Seems to me when I look around," he comments, "that the best surgeons by and large are the people who adhere to that principle, and not just in training. It is preparation for what surgical practice is like."

He recognizes the tremendous work load today's resident faces and says that work that doesn't require a resident should be eliminated—like putting in i.v.s, hanging blood transfusions, mixing solutions, drawing blood chemistries. "Yes, we need to look at work load and determine sensible durations of work. But on each service there are

'the sleeping quarters are the pits on such-and-such service'. Action can be taken on amenities and work load."

In the meantime, New York has moved from discussion and dissension to finding ways to make the changes now mandated. Change will not come cheap. It will take up to \$270 million, reported Kenneth Thorpe, PhD in an impact study released in December 1988. David Axelrod, NY commissioner of health, contracted Thorpe, a health economist at the Harvard School of Public Health, to take an independent look at the financial implications of the changes.

Thorpe surveyed about 200 of the roughly 280 hospitals in New York, focusing on teaching hospitals and those with at least 15,000 unscheduled emergency room visits per year. He concentrated on operation of the E.R., implications of restricting residency hours to 80 per week, the extent of resident supervision by attendings, and the implications of 24-hour coverage by i.v., phlebotomy and messenger/patient transport personnel.

"The most dramatic effect will be a sharp rise in demand for ancillary personnel," says Thorpe. "New York state alone needs approximately 4,000 full-time personnel." This comes at a time of shortage of people to take these positions.

He reports that the survey also points out holes in supervision. "The results illustrate something most people know: After 5 p.m., medicine, pediatrics and psychiatry are mostly house staff-driven operations. This is particularly true in the 11 public hospitals, where attendings do rounds only in the morning.

"The Libby Zion case was a dramatic example of the lack of on-site supervision and of residents making decisions without checking with the attendings ultimately responsible."

Thorpe hastens to add that this trend is the exact opposite in obstetrics and surgery. "Here, residents are much better covered and supervised. What worries surgeons is the 80-hour limit per week." Thorpe's survey shows that surgical residents commonly work 100 hours/week, whereas residents in internal medicine work 85 to 90 hours.

"The function of the teaching program has shifted too much from education to service," he comments. "On one side is pure service at public hospitals and, on the other side, the surgical programs, which have more on-site training."



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Axelrod has said that New York will pay for cost increases in hiring ancillary support and the additional residents or non-physician providers necessary to meet the 80-hour limit. Since New York is essentially on a DRG (diagnostic related group) system across the board, says Thorpe, the state can increase reimbursement rates. "Split between Medicaid and Blue Cross, the increased payment rate per case is really quite small, approximately \$100 per case," he says. "New York hospitals have an \$11 billion revenue, so the \$270 million the changes will cost is under three percent of this."

New York's problems are acknowledged to be quite different from those in other states—it has a larger public hospital system, more foreign medical graduates, more cases of AIDS. "Dr. Axelrod is making these reforms with the patient in mind," says Thorpe. "Reform couldn't have happened in New York without him."

No one knows yet whether the changes will attract medical students or repel them from residencies in New York. "People either love or hate the Big Apple, anyway," comments Curtis Prout '41, chairman of the HMS internship advisory committee. "I haven't

heard students mention changes in the state legislation as a reason to go there or not." Prout has been advising Harvard students on residencies for the past 12 years. "A residency program's hours is one factor, but it seems to be a small factor for our students. In fact I'm hearing about it less than four or five years ago, when many programs (except surgery) made on-call every third night instead of every other."

Of perhaps broader concern to students is the increasing indebtedness incurred. "They now have the responsibility to repay student loans during their residency years," says Mitchell Spellman, HMS dean for medical services.

Many residents in their third year moonlight at other hospitals to make money to repay student loans that can amount to as much as \$100,000. The national average they can make moonlighting is \$7,100 per year, according to Ken Thorpe. But an 80-hour work restriction would essentially eliminate moonlighting. Government loans can be deferred while still considered a student, so Harvard is pondering a change of terminology to call residents "students" instead of "clinical or research fellows"—a move that about 45 other medical schools have already made.

Whatever the outcome of New York's changes and of discussion in medical circles across the country, says Spellman: "The nature of graduate medical education will be significantly influenced. The challenge will be not to destroy the learning process, the growth that comes from assuming responsibility for one's actions."

Where does the Egdahl report leave Massachusetts? "It puts everything on the table," says Rabkin. The program, if carried out, he says, prevents the tough-as-nails, rite-of-passage attitude. It would clearly show that the medical world is different now. "When I was a house officer, the older physicians would talk about the days of the iron intern when they were house officers," he recalls. "But no one would do that now."

Cost is a central issue, particularly without a David Axelrod and a state system willing to foot some of the bill. "It's important to be realistic about what we can do," says Rabkin. He points out that despite all kinds of cuts and efficiency programs, Beth Israel Hospital has an operating budget deficit for its 88/89 fiscal year of minus \$3.5 million, and other hospitals in the city face even larger deficits. "There are all kinds of priorities," he adds. "Changes in residency programs have to be weighed with everything else."



Diagnosis by Computer?

by Debra J. Trione

In the March 31, 1988 issue of *The New England Journal of Medicine* an article appeared by Lee Goldman and others on a new computer protocol that had recently been used successfully at the Brigham and Women's Hospital to predict myocardial infarction in emergency department patients with chest pain. The authors concluded that physicians using this computer protocol had a significantly higher success rate in determining whether patients with chest pain should be admitted to the coronary care unit than did physicians acting without such aids. They said specifically that decisions based solely on the computer protocol would have reduced the admission of patients without infarction to the unit by 11.5 percent, without adversely affecting the admission of those who later developed complications requiring intensive care.

Though the authors cautioned that such computer protocols are not "perfect discriminators," they concluded that "decision protocols based on the sophisticated analysis of large, computerized sets of data can have better results than physicians' unaided judgment."

Lost in this report, and in the recent optimism of some that computers will soon be used to facilitate every facet of medical decision making, is any acknowledgment of the many ways in which the judgments of real life physicians are

vastly superior to those of any computer. Preliminary successes using computer aids have at times seemed to devalue the intelligence and facility of physicians. Computer diagnostic aids may be impressive technological achievements, but their shortcomings can serve to highlight the very human side of the diagnostic process.

No one knows this better than Octo Barnett '56, who started working on computers as a medical resident and hasn't stopped since. He is now director of the Laboratory of Computer Science (LCS) at Massachusetts General Hospital and professor of medicine at HMS. "The computer is an amazing thing that at times looks so bright and at times looks so stupid," says Barnett, leaning back into his chair with an air of introspection. "Trying to teach medical logic to a computer is a very instructive activity that makes the physician-designer struggle a great deal. I've often been impressed by great clinicians who say, 'Well, that patient has disease X'. How do you know he has disease X? 'Because he looks like a patient with disease X'. Such a global pattern recognition answer is not useful to a student trying to understand the diagnostic strategy for disease X. But the attempt to dissect out the characteristics and issues that led the clinician to that conclusion is ultimately very useful in terms of understanding the process."

There is certainly no question that

computers can process, store and retrieve large quantities of information at great speed, with accuracy and precision. Not subject to boredom or inattention, they consistently outshine human competitors at repetitive, well-defined tasks, particularly those requiring a reliable long-term memory.

It is safe to assume that computers will play an ever-greater role in medical decision making as the profession becomes increasingly dependent on the management and retrieval of an almost overwhelming quantity of information (over 300,000 articles are published in the biomedical literature each year). Computer-based literature searches like PaperChase and BRS Collegiate have been developed. Computer management aids can be used to alert physicians to possible drug incompatibilities. And diagnostic problem-solving aids can suggest which diseases to consider, given a limited set of signs and symptoms.

In June 1987, a computer diagnostic aid developed by Barnett and colleagues at the LCS was offered to physicians commercially on a national basis. Barnett is modest about the reach of his program, called DXplain. "The important issue," he says, "is not whether the computer program uses the same strategies that a physician would use; indeed, the attempt to model such a complex phenomenon as diagnostic judgment may be far beyond the scope of any feasible experiment."

Instead of attempting to provide a single probable diagnosis for any given set of symptoms, DXplain presents the physician with a list of possibilities to consider. "It's primarily a pattern-matching, statistical model using algorithms to determine the relative importance of different descriptive terms in either suggesting or contradicting the presence of various diseases," says Barnett. "It gives an indication of the likelihood of disease X being the cause of symptom A, B and C. And it also lists other diseases that could be associated with all or a subset of symptoms."

When the physician calls up DXplain on a terminal, he or she is first prompted to enter standard information—the patient's age, sex and duration of condition. Then the program asks the physician to enter any terms describing the disease. Using these terms, the system then provides ranked lists of common and rare diseases that may be worth considering as possible explanations for some or all of the clinical manifestations.

One of the largest problems the LCS group faced in developing this program (and still faces in improving it) is how to get the computer to understand the

language physicians commonly use in describing patients. Normally, if DXplain doesn't understand the doctor's term, it suggests a series of possible synonymous phrases that may be of greater or lesser specificity. If the doctor types arthritis, for instance, the computer will ask whether that's gummatus arthritis, migratory arthritis or peripheral arthritis. But it's not always this simple.

"We physicians tend to express ourselves in a medical vocabulary that's almost as rich as English," says Barnett. "A computer can understand only those terms it has been programmed to recognize. Think of the number of synonyms and antonyms, and the different locations and attributes and characteristics of the feeling of pain. And what if I have a pain that's much worse on Monday morning? That's a very important characteristic, but how do I tell the computer about it? And what language do I use? Do I try to pick the answer off the screen? Do I try to type in the letters or words? Here's this poor little computer trying to understand what's going on, so it wrestles a lot with the physician to get an answer. It's a major challenge to know how to program the computer to simplify a complex statement into terms that are already in its vocabulary."

Vocabulary problems, which seem prohibitive now, may become less of a burden as programmers become more sophisticated in the art of talking to computers. But is there anything more basic or intrinsic about the way physicians think about diagnostic problems, that computers may *never* be able to accomplish? "You have to be very careful about using the word *never*," warns Barnett, but he knows of many diagnostic tasks that computers can't even attempt, as yet.

"You give good clinicians four or five symptoms," says Barnett, "and even if it's not clear why, they may say, 'Hey, have you thought about this disease?' If you look at the mathematical probabilities, there may be little really that indicates that disease. But there's something about the combination of things that I like to call the essence of the disease. It's very difficult to teach a computer how to tell the difference between a Van Gogh and a Rembrandt. Most people who know anything about art can tell at once, but how do you reflect the distinction in the rules and algorithms that a computer understands? The same thing is true of the diagnostic process. We don't quite know how to put it together, but we've seen it before and we say, 'Yes, that's a Van Gogh'."



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Another capability that most computer-based diagnostic programs lack, says Barnett, is an appreciation of pathophysiology, or "deep knowledge." This kind of understanding—one that assimilates and organizes a very large and complex set of facts and relationships—is what physicians spend four years of medical school and four years training just trying to get a feel for.

"If a person has diarrhea for a number of days, it's important to understand what sort of metabolic derangements this can cause—that they're losing potassium out of the cells. They may tend to get acidotic, and there's a whole chain of events involved in the pathophysiology of this—what it might do to the cardiovascular system and how it relates in turn to the blood flow to the kidney. There are an enormous number of interrelationships between systems. Theoretically the computer might be able to understand these things, but it's been enormously difficult to teach it any depth of understanding. The human body is a very complicated system."

Several people have suggested that the diagnostic process can be modelled as a funnel. In the early stages—at the wide end of the funnel—a physician employs his or her understanding of the complex relationships among a patient's personal, social, family and employment circumstances—categories of understanding not readily quantified or classified. A sophisticated understanding of

the patient's life circumstances may yield a vastly different picture of the diagnosis and resulting treatment. And such an understanding often requires not just common sense, but intuition, especially when the hard information is incomplete, ambiguous or partially contradictory.

"There's a story," says Barnett, "of a woman who comes in complaining of pain in her shoulder. Now the computer might take a complete medical history, but the physician might also remember that this woman works in a feed store. And the physician could think to ask, 'Millie, you haven't been lifting those big fertilizer sacks off the top shelf have you?' A computer can't even begin to put those things together."

Barnett claims that emotion is another factor near the wide end of the funnel that may represent a weak link in the computer's ability. "We are increasingly aware that anger, depression and anxiety are not only common reactions to illness," he says, "but that they may also amplify disease. Computers would never understand the various ways that the anger or hurt or pain of life's experiences manifest themselves."

If the problem can be narrowed down to, say, determining the type of thyroid disease, and the physician just needs help interpreting the results of eight different lab tests, a well designed computer protocol can be very useful. Here the problem is very specific and there are only a limited number of diseases to be considered. Besides the protocol referred to earlier for predicting the likely presence of an MI, other computer protocols have been designed to aid in the selection of antibiotic treatment for bacteremia, in evaluating acid-base abnormalities, and in assisting the differential diagnosis of congenital abnormalities in the newborn.

Even at the narrow end of the funnel, though, there can be problems with computer aids. And these problems, too, can reveal much about the diagnostic process itself. As one of the early workers on computer diagnostic aids, Howard Bleich, now co-president of the HMS Center for Clinical Computing and associate professor of medicine at HMS, understands these problems well.

For 10 years Bleich worked to build a computer expert system that could assist physicians in diagnosing disturbances within the narrow realm of acid-base balance and fluid electrolyte problems. His system integrated laboratory test results with other types of clinical information, and physician responses to queries, to generate differential diagnoses, a reference list of sources on the

problem, and suggestions on how best to manage the patient's condition. He acknowledges, though, that even within the small arena of his specialty, which "covers less than one percent of the problems a doctor has to deal with," he experienced many problems similar to those Barnett confronted while developing the more generalized DXplain.

"Many of the weaknesses of computer diagnostic aids boil down to the fact that computers don't do pattern matching very well," Bleich summarizes broadly. "You can recognize someone you haven't seen in years by the walk. A guy I was in the air force with, whom I hadn't seen for 22 years, unexpectedly came up behind me and said something while I was arranging my slides at a conference recently. Without even turning around I called out his name. The human mind is excellent at pattern recognition, though it does have some weaknesses in other areas."

Most computer programs that offer probable diagnoses work by addition. But in diagnostic problem solving, says Bleich, the whole is often larger than a sum of the parts. "If someone has chest pain, the odds are that they're normal. If someone complains of sweating, the odds are still that they're normal. If they have shortness of breath, if they're 65 years old, or if they smoke, none of those things, independently, indicate any abnormality. Each individual fact leads to the conclusion that the patient is probably normal. But taken together the constellation of factors could be alarming; a 65-year-old man who smokes, has chest pain, breaks out in a sweat, and has shortness of breath may well need immediate medical attention."

The scenario sketched by Bleich for recognizing a potential heart attack victim may be relatively simple compared to most diagnostic problems doctors have to face. Pattern matching capabilities become very important when one considers that a great deal of the diagnostic struggle is accomplished in the relationships between and among the individual symptoms. If a program tries to deal with all the combinations, it will probably encounter what programmers call combinatorial explosion. Bleich claims that he calculated at one point that "it would take all the time since the creation of the universe to program in all the important anatomical, physiological and temporal relations just within my small area of expertise."

Pathophysiology is one area in which combinatorial explosion is most apparent. "If the patient has pain in the right shoulder, the physician knows that,



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because of the configuration of nerves in that area, it may be caused by a problem in the gall bladder," says Bleich. "A physician could be particularly suspicious of this if he or she knew there was a problem with the gall bladder. But if I tried to program an understanding like that into a computer, the number of relations I'd have to enter would be phenomenal."

Temporal thinking is another kind of pattern matching essential to diagnostic thinking. Bleich explains that a patient may come in with only one of the 20 typical symptoms for a disease, and develop the others over time. Without a sense of how a problem progresses over time, a computer may be stumped or come finally to a very erroneous conclusion.

The most successful uses of computers in medicine so far have been those that have been able to accentuate computer strengths, without expecting the machines to perform tasks clearly beyond them. They have very successfully been used for instance in literature searching and in hospital record keeping, including records on the location of patients, on what's been done to them, and in the financial operations of the hospital. Bleich is skeptical that computers will get very far, at least in the immediate future, with diagnostic pattern-matching problems. "You could think of the human brain as very powerful, but slow, and the computer as a

fast machine with many circuits, but relatively weak," he says. "If the problem you have to face is how to swat a fly, you wouldn't use a bulldozer. It would just be much too slow. It's important to match the problem with the device, and diagnostic problem solving is often very complex."

Despite all of their apparent limitations, there seems to be very little that, at least theoretically, computers cannot do. And computer systems are constantly being brought up to date and improved. Barnett notes, for instance, that he and a board of colleagues meet frequently to modernize DXplain in light of suggestions they constantly receive from users. "The computer has an enormous gift to be incrementally improved," he says, "so you find an area and correct that and find something else and correct that, and you keep on working on the same system over time. That's very different from what most life is all about."

One problem with this, as Barnett notes, is in finding the time and energy to accumulate a complete and systematic record. In addition to a matrix of about 5,000 signs and symptoms and about 2,000 diseases, the DXplain program also includes approximately 70,000 relationships to link symptoms with diseases. But according to Barnett, it never seems to be enough, particularly in light of the information explosion in medicine. "Medical personnel generally don't have the time to devote to this laborious task of entering data," says Barnett. "And you have to think very carefully about how you program anything in, which takes time."

The fact that DXplain does not search for any one most likely disease candidate, but offers several, is evidence that this particular computer protocol is not designed to compete with physicians. Barnett calls the program a quick reference tool or "mind jogger" for those confronted with a wide range of disease possibilities.

Most computer experts working on diagnostic aids concede that physicians must always remain the final judge of a diagnosis or treatment plan. The search will undoubtedly go on, however, for an effective, symbiotic relationship between physician and computer aid that does not distort the essential value of human intuition, interaction and intelligence. It is a search that will continue to challenge the imaginations of physicians for some time to come, and that, if successful, will enhance the quality of their professional lives. □



FLIGHT

THE ELOQUENCE OF SILENCE

When tragedy leaves open wounds, silence can be the most soothing dressing. To blindly uncover the "truth" in the midst of a tragedy sacrifices people's need for hope when they are most vulnerable. It is a sacrifice that contemporary ethical and legal advocates seem to brush aside, under the banners of informed consent, due process and public disclosure. Just as physicians have come to recognize the harm of the mechanistic pursuit of truth via science, we now need to see clearly the harm of uncovering the truth in the

by Harold J. Bursztajn

midst of illness, even in the name of ethical duty or legal obligation.

In the past I have offered the concepts of ethicogenesis and critogenesis to remind the ethicist and the Athenian judge within each of us of this harm. Yet, when it comes to the story I wish to tell, these abstract terms are inadequate: the language we need lies closer to image and metaphor than it does to concept. Perhaps this is so because it is a story of the aged. "The aged, sharply

aware of their limited imprint, are in a good position to communicate without words," wrote Avery Weismann in *The Coping Capacity: On the Nature of Being Mortal* (1884).

So we must turn to traditions even older than medicine, the poetic and the religious, to illuminate the conflict between compassion and the pursuit of truth in the midst of tragedy. "The Sacrifice of Isaac" in Genesis reminds us of how ancient the conflict between truth and compassion is:

"Isaac spoke to his father Abraham. 'Father,' he said. 'Yes my son,' he replied.

'Look,' he said, 'here are the fire and the wood, but where is the lamb for the burnt offering?' Abraham answered, 'My son, God himself will provide the lamb for the burnt offering'. Then the two of them went on together.

"When they arrived at the place God pointed out to him, Abraham built an altar there, and arranged the wood. Then he bound his son Isaac and put him on the altar on top of the wood. Abraham stretched out his hand and seized the knife to kill his son." (*Genesis 22: 7-11*)

After a life filled with adventure and professional accomplishment, Ms. D., a tall, elegant, worldly wise woman, had moved to the country in Maine where the woods and bays meet. When I first met her, introduced by a friend, she had already had for several months the diagnosis of a kind of breast cancer with which no one had survived more than two years. She believed the diagnosis, but refused to believe she would be dead so soon. No, she was going to beat the odds by using every possible means, including various holistic health measures.

"Such beautiful woods these are," she said to me one day as we walked through the woods. "They are still and yet alive."

She continued in her composed manner, "Look, with your background in psychoanalysis, you know that there exists an influence between the mind and body. That's why, along with the radiation and chemotherapy they are giving me, good nutrition, a macrobiotic diet, visualization, relaxation, and cleaning myself of negative feelings and thoughts are going to help. If I do all that, I know I can beat the odds, don't you think so?"

I did not think so, but what could I say? I could say neither no nor yes. I chose to remain silent as a friend. Silent, but supportive. At some point I mumbled something like, "Oh my, how I admire the way you take charge." That was it. We kept walking silently through the woods. As we did, I remembered being told how she devotedly had nursed her own dying mother.

Soon after she left the Boston hospital where she had travelled for her mastectomy, we met in her kitchen filled with herbs. She and her husband had joined forces. Each had changed. He, a fighter, a talented sculptor of birds, seemed more peaceful and yet more in the picture than ever. She seemed even stronger, no longer spoke of banishing negative thoughts, but appeared to be



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in the midst of a fierce struggle. He and I spoke of the Battle of Gettysburg. She spoke of her brothers, and how once to tease her they had left her up on a roof. How beautiful she looked that day even as the battle raged.

Toward the very end, there was one last glimmer of hope. She was told at a famous medical center that there may have been a misdiagnosis and that she might have a benign condition. Oh my, how I seized on that hope myself. How I broadcasted and broadcasted it to her closest friends. "You see, you see!" I would say. Somehow in her hope, I experienced a hope for reprieve from those things—my own patients' deaths, my family's deaths, my own losses and eventual death—toward which I had previously felt so weak and rebellious. But there was no mistaken diagnosis.

The last time I saw her the initial diagnosis was being confirmed as metastases ravaged her as she lay on her bed. She was at peace with herself and yet very strong. She pointed to the photograph hanging on her bedroom wall of her father in a Danish army uniform. What a handsome man he was. The Danes were always a peaceable people, yet there was a need for an army. She, the most peaceable of souls, was proud of him in that uniform.

She was the first in a circle of friends who had known me for two years to ask about my family's experiences during the Holocaust. We spoke. She ended

by telling me of a beautiful piece of land next to hers that was up for sale. "Go look at it," she said.

She was dead a few months later. It was spring. She had lived on for a total of two years and eleven months from the time of diagnosis. She did beat the odds.

During those years she gave many gifts of friendship and encouragement to those who knew her. She included a gift for me, a profound gift—a love of nature. Before, I had been so preoccupied with my own family's history of sorrow, that I could not appreciate the nature around me in the present.

She left another gift for me—a gift of feeling comfortable amidst the varieties of silence. From the silence we shared, I learned that all silence is not a lie, that there can be a truth in silence as profound as there can be in the spoken word. I now feel the depth of the truism that there are times when one has to choose when to speak or when to be silent and then live with it. Such silence need not be consent. If it is given with a spirit of compassion, it can take hold and comfort in a particular kind of way.

This is a lesson that is hard to learn, especially in this age of showing, of informed consent, of telling everything and of true confessions. We must be careful that our wish to show and be shown, our curiosity, our wish to educate, to be informed, to know, to control, and to unmask does not run astray.

We must put neither ourselves nor others in the position of mortal danger, as the mythical Greek hero Odysseus was, when shipwrecked on a foreign coast and he had to lie to survive. In his final journey home, Odysseus learned how to be silent, to preserve the truth and at the same time preserve his own survival and the survival of hope. Not that he forgot how to disguise when necessary, but it became a matter of judgment rather than habit.

When to speak and when to be silent, when to look and when to unmask, and when to leave be and to wait patiently in silence, that is the essence of any decision involving potentially tragic consequences. Decisions involving other people are fraught with the dangers of acting solely in self interest rather than the interests of those toward whom one has a duty.

Yet, when we seek certainty by pointing to duty, we still find ourselves in conflict. The need to choose remains. Had a member of Ms. D's family or a close mutual friend asked the question she posed, would the balance between truth and the need to preserve hope



have remained the same? Would my interests and duties as Ms. D's friend? Were it not for oblivion so dogging our tracks, could our exploration have reached the place where truth and compassion meet in words? And finally, why did this discreet, caring soul, so careful not to burden her friends with her suffering, pose so direct a question to me? Did she seek more that day than someone to walk beside, play with, and be remembered by?

We cannot say everything that comes to mind. There is always a choice to be made. A first hope is that I am making a choice for others as much as I am for myself. Yet another hope is that in choosing, I am free to choose either to speak or to be silent irrespective of how I experience activity or passivity in the face of tragedy. Here only "know thyself" can be of help. At the end of Odysseus' journey, he is recognized by Penelope, and perhaps himself recognizes those sides of himself (one wonders, the feminine?) previously portrayed as the goddess Athena.

When I returned to Maine, the Canada geese were migrating south. Soon thereafter, I would approach Ms. D's husband and ask him what of this I could now reveal and what need be kept silent.

"None of you shall come near anyone of his own flesh to uncover nakedness: I am the Lord." (*Levitcus* 18:6)

There is a silence of fear, rage, frustration, disappointment or despair. There is also a silence of exploitation, domination, control and manipulation by the withholding of information. There is still another silence of withdrawal and abandonment. Our age has seen all these forms of silence at work, notably in the Nazi Holocaust in World War II, where victim, perpetrator and bystander each wore silence to clothe the most differing emotions and purposes imaginable.

Walter Laquer has detailed such varied uses of silence in *The Terrible Secret: The Suppression of the Truth About Hitler's Final Solution* (1980). How Nazi physicians were engaged in particular abuses, including those of silence, has been recently unveiled by Robert Jay Lifton in *Medical Killing and the Psychology of Genocide* (1986).

Yet, even during the Holocaust, the unspoken could be communicated in a silence that allowed for life. Sometime in 1940, after having been tortured by the Nazis, my father lay suspended between despair and no doubt suicidal action. In a prison infirmary in newly

Psychoanalysis began with the impossible injunction, "Say everything that comes to mind."

occupied Poland, a prison physician, himself a prisoner, stopped by. He looked at my father, was silent, and then put his silence in the midst of the ongoing murder in a context: "If you are fated to survive this war, you will." My father took heart, and survived to save the lives of others, including his future wife, my mother in 1944.

As physicians or patients, we must always question our purposes, our own moments of silence. In the course of the physician/patient relationship, we need to be continually alert to abuses of silence, so well portrayed in Jay Katz's *The Silent World of Doctor and Patient* (1984).

On the other hand, examples of the need for silence abound. In Oliver Sacks's book *The Man Who Mistook his Wife for a Hat* (1985), for instance, a music professor, having lost recognition of people and things, lives in a world of music. Sacks chooses not to tell him what his condition is. In another case, a man has lost his memory and has aged a great deal, but still believes himself to be young. Here, Sacks attempts to force the man to recognize the truth by holding up a mirror to the man's face. The man recoils, and so does Sacks, from the cruelty of his act.

Finally, there is silence for the good. The hands of a woman who has been blind since birth have atrophied through disuse because everyone has waited on her hand and foot. Sacks asks that the

nurses, rather than feed her, place the food so that the woman can reach for it herself. She is not told that this is being done, there is no informed consent. It is done. Finally, impatient, she reaches for the food herself. A year and a half later, she has become a locally well-known sculptress.

The philosophical issues involved in these choices are brilliantly clarified in Sissela Bok's twin masterpieces, *Moral Choice in Public and Private Life* (1978) and *Secrets: On the Ethics of Concealment and Revelation* (1983). Verbal silence has its parallels in a visual world, which we can discover in John Berger's remarkable *Ways of Seeing* (1972). In an age of mechanical reproduction of the visual image, the choice of what is to be reproduced raises all the same questions: what to reveal or hide, communicate or leave alone. As with the spoken word, the choices have full potential for good and evil.

In my own practice of psychiatry, the choice between words and silence is crystallized in psychoanalysis. Psychoanalysis began with the impossible injunction, "Say everything that comes to mind." Of course, we cannot; neither patient nor analyst can or must. The choices that each makes, about what to say and what to be silent about, achieve a degree of freedom only in the course of a long, uncertain relationship in which two human beings strive to know each other and themselves.

When understood in this way, as in Arnold Modell's *Psychoanalysis in a New Context* (1984), psychoanalysis joins other traditions and disciplines concerned with the choice of when to speak and when to be silent. These choices cannot be made in a vacuum without recourse to the wisdom and the symbols of art, philosophy, poetry and religion. Alienated from these traditions, from the ancient dance of truth clothed in symbol and silence, psychoanalysis cannot achieve wisdom or grace. □

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Harriet Ryan Albee

CHARITY BEGINS AT THE CHANNING HOME

by Amalie M. Kass

No one would have expected that one day Harriet Ryan would be honored by a professorship in her name at Harvard Medical School. Daughter of Irish-Catholic immigrants to 19th-century Boston, minimally educated, and with no financial resources of her own, she lacked the qualities usually associated with academic luster. But, in an age when charity was considered a function only of the "reputable" classes and an appropriate outlet only for upper-class ladies, Harriet Ryan founded one of the first home/hospitals for tuberculous patients in the nation. In the process she also showed some of Boston's most influential families how to give help to needy women.

To be ill, poor and homeless is a scenario for misery everywhere and at all times. For destitute women suffering from tuberculosis in mid-19th-century Boston, fate was particularly cruel. Hospitals refused patients for whom long-term care was necessary, and the city lacked social services that might have lessened the emotional anguish and relieved the squalid living arrangements of the chronically ill. The families of such hopeless persons were often unable or unwilling to provide assistance. Few Bostonians responded with more than dreary laments, frequently blaming the victims themselves for the misery they endured. Such was the situation to which Harriet Ryan responded.



Harriet Ryan was born March 5, 1829 on Province Street in Boston, where colonial governors had lived before the American Revolution. She was baptized at the Cathedral of the Holy Cross on nearby Franklin Street.

Large-scale Irish-Catholic immigration had not yet begun. Harriet's parents had recently arrived in Boston from Nova Scotia where they had prospered until a fire had destroyed Richard Ryan's

small store. More adversity followed. Harriet's father was severely injured in an explosion on Brewster's Island where he had found a job blasting rocks. He remained a cripple for the rest of his life. His wife, Elizabeth Cannon Ryan, an unusually resilient woman of French ancestry, became the mainstay of the family.

Despite poverty and heavy responsibilities to her family, Elizabeth Ryan set an example to her daughter by taking dying women one at a time into her home, and by refusing to accept money for their care. Harriet and the rest of the family were expected to help, and if any of them complained about the difficulty and tedium of nursing the incurably ill, they were reminded that it was God's work they were doing. By the age of 12 Harriet Ryan had learned this lesson well.

She had also been introduced to the horror of tuberculosis, for which there was no certain cause and no known cure. Dubbed the "white plague" and the "scourge" of industrial societies, phthisis or consumption (as tuberculosis was generally called before Robert Koch discovered the tubercle bacillus in 1882) was widespread among all classes. A medical commission studying the sanitary condition of Boston pointed out that consumption was "by far the most fatal of all the diseases which shorten the lives of the inhabitants of this country."





Volume. First.
Case Book
of the
Hospital for Sick and Destitute Women
in Channing St.

Opened on May 1st. 1857.

J. Nelson Borland M.D.
Physician
Charles D. Hornans M.D.
Surgeon

Tuberculosis took an especially heavy toll among the poor living in crowded, unsanitary conditions with inadequate nourishment, air and light. During the 10 years between 1850 and 1859, 18.07 percent of all deaths in Boston were attributed to phthisis. Furthermore, Boston had a higher death rate than London, though London was notorious for its teeming slums and Dickensian squalor.

In the 1840s and '50s the numbers of Irish immigrants coming to Boston increased dramatically as economic distress at home became more and more severe. The new arrivals contributed disproportionately to the health statistics. By 1855, 28.8 percent of Boston's population was Irish, yet 50.7 percent of deaths occurred among this group. To medical and sanitary observers, who did not realize that germs cause disease, it seemed self-evident that nationality must explain the preponderance of consumption among the recently arrived immigrants and their offspring. The Irish were deemed by medical observers to have a hereditary disposition for the dread disease.

Harriet Ryan, like everyone else, did not understand infection but she quickly learned that phthisis was con-

tagious. One of her sisters died of consumption, a brother was afflicted, and she herself began to show the tell-tale signs—the persistent cough, the general wasting of the body, and the bright eyes and flushed face brought on by intermittent fevers.

Her first employment was as a lady's maid for a fine family on Beacon Street. But the job was too demanding. For a while she tried dressmaking but found that equally tiring. The doctor warned that she must have fresh air, so she turned to hairdressing which allowed time outdoors walking to the homes of her clients. Her customers found her unusually congenial and despite the difference in background and class, they often offered her real friendship.

The life of one such woman, Emma Forbes Cary, was completely altered by her friendship with Harriet Ryan. Emma was one of five sisters in a prestigious family with notable antecedents. Her sister Elizabeth Cary Agassiz later founded Radcliffe College.

The Carys were living on Temple Place in 1854 when Harriet Ryan was summoned to improve 21-year-old Emma's coiffure. "One morning," Emma recalled, "there appeared in my room a lovely young woman who looked like a

Fra Angelico angel. (She had) rippling hair . . . shining eyes and a peach blossom complexion. Her mouth was beautiful, whether it expressed joy or grief or enthusiasm, or gave that enchanting laugh which only belongs to those of Celtic blood."

Emma Cary was also struck by Harriet's religious nature. The young hairdresser seemed possessed of faith such as Unitarian Emma had never seen. They became intimate friends, exchanging confidences and sharing a common concern for the poor. Emma had long felt unsatisfied by her family's religious beliefs. On Harriet's advice she sought out Bishop Fitzpatrick and entered a course of instruction. Within a year she had converted to Catholicism.

Meanwhile Harriet had adopted her mother's practice, and after her long working hours, she too spent evenings and nights caring for sick women, some of whom she found in filthy garrets or cellars, without heat or decent nourishment. Overcoming her dread of rats and vermin, she would take the women to her own quarters if that were possible, or stay with them where they were until they died. The contrast between the beautiful homes where she prepared the ladies for balls and theater parties, and the miserable surroundings and repulsive conditions of the women with whom she waited and prayed, seemed to heighten Harriet's conviction that she was "working just for God."

As her customers became aware of what she was doing, some expressed their interest and desire to help, contributing small amounts of money for the expenses involved. Gradually Harriet realized that with their assistance and her own hard work she might be able to care for more than one patient at a time. By 1857 she was seeking appropriate housing, only to discover that it was nearly impossible to find rentable space where incurable women could wait for death.

Harriet was then living on Channing Street and at the corner was the Federal Street Church. This was the site where in 1788 the Massachusetts Convention had voted to ratify the recently proposed Constitution of the United States. In 1809 Charles Bulfinch had designed a new Gothic-style church to replace a simpler meeting house.

From 1803 to 1842, the Federal Street Church had been the pulpit of William Ellery Channing, a founder of



Unitarianism in the United States and an important figure in social reform. Channing's name was still associated with the church and the street adjoining it had been named in his honor. Neither church nor street exists today; the area has long since become the city's financial center, the towering Bank of Boston replacing Channing's church.

Passing by the church nearly every day, Harriet Ryan realized that the lower rooms of the vestry hall adjoining the church were not in use. With the encouragement of some of her Beacon Hill friends, she persuaded the minister, Ezra Stiles Gannett, and the vestrymen to rent her the basement for \$100 a year.

Harriet's immediate concern was a young woman who had come to Boston from rural Massachusetts, had briefly been a teacher, but was now terminally ill with tuberculosis. Harriet had been going to her barren room three times daily to feed her, keeping vigil with her throughout the lonely nights. It was a cruel irony that when a decent home was available, Harriet visited the woman's room only to find that she had just died. Nonetheless Harriet took her to the new home preparatory to burial.

On May 1, 1857 the basement room, soon known as the Channing Street Home, was formally opened with seven beds, all immediately filled. During the daylight hours two women served as hired matrons, but in the evening and nighttime, after completing her daily tasks, Harriet Ryan herself provided care for the sick and dying. There was little nursing other than clean linen, warm blankets and nourishing food. For the latter, Harriet went three times a week to stand in line at Parker's Hotel where Boston's paupers received free soup.

During the first two years of its operations, the Channing Street Home admitted 52 patients. Eighteen died and twenty were discharged either well or improved. Four women were not treated, one was dismissed for bad conduct, two deserted, and seven remained at the home. Not all of these patients were in the last stages of consumption, but the high death rate tells enough.

From the outset, Harriet Ryan's personal sacrifices and her quiet determination attracted wide support for the home. Her wealthy friends donated money and made gifts of fruit and flowers. When Gannett and the officers of the Federal Street Church realized more fully the benefit to which their vestry

was being used, they quickly decided to eliminate the rental fee. John N. Borland and Samuel A. Green, both graduates of HMS, became physicians to the home and provided access to other medical support. In time Green

would be a president of the Massachusetts Historical Society and, from 1881 to 1882, mayor of Boston.

The ladies who had been Harriet's most loyal admirers decided that a charity fair was needed to provide funds for



Federal Street Church



an endowment. The Music Hall was hired for May 22, 1859 and many renowned poets, including Ralph Waldo Emerson, James Russell Lowell and Oliver Wendell Holmes, contributed verses to be read to the assemblage. The minister of the First Church, Nathaniel Frothingham, sent a long poem, later published in a collection of his writings. The opening stanzas from "The Home for Destitute and Incurable Women" suggest the impact of Harriet Ryan's work.

Incurable! Sweet Nature's healing forces
Struck at the root, and wasted at
the spring;
While Art and Science, with their grand
resources,
No means can study out, no rescue
bring.

Incurable! The fatal word is spoken:
That smites the faint heart with its
flat despair;
Yet it is heart with spirit not all broken.
If Gratitude and Faith their solace
bear.

Within two years of the opening of
the home, the congregation of the Fed-

eral Street Church had moved to Arlington Street and its buildings were sold. The Channing Home moved too, first to South Street and then to McLean Street near Massachusetts General Hospital. The number of beds increased. Bequests added to the endowment. In 1868 the home was formally incorporated, with officers and a board of directors elected (including members of the Cary/Agassiz family), and annual reports were issued beginning in 1869. Harriet Ryan was always acknowledged as founder and matron.

Meanwhile, Harriet's personal life had taken a complete turn. In 1864 she met John Albee, descendant of a family that had lived in Massachusetts since the earliest days of the colony. He was a Unitarian four years her junior, a scholar, poet and essayist, educated at Phillips Andover Academy and Harvard College. He had also graduated from Harvard Divinity School but had never been ordained.

Albee was reputed to be "very liberal, earnest, a gentleman in every sense." He was acquainted with Emerson and the Concord intelligentsia as well as with the abolitionists and other reformers in Boston and Cambridge.

However, he was too sensitive to endure city life and had acquired an old, historic house in New Castle, New Hampshire, a small coastal town near Portsmouth.

Harriet's new-found and unexpected love did not please some of her friends who rather expected her to sacrifice her personal happiness for the good of the home. She too was conflicted. "My conscience accuses me of faithlessness, and it makes me sad," she confessed. However Albee seemed "like a magnet" and she acceded to romance.

Harriet and John Albee were married September 1, 1864 at St. Vincent de Paul Church. Despite his strong Unitarian associations, Albee recognized and appreciated Harriet's unwavering devotion to the Roman Catholic Church. The marriage records include his written agreement that Harriet should have complete freedom to exercise her own faith and that their children would be brought up accordingly.

After her marriage, Harriet Albee spent the winter months in Boston supervising the Channing Home and her summers in New Hampshire, where she entertained poets and writers, including Harriet Beecher Stowe.



The building at Pilgrim Road.



Patients on the veranda, Pilgrim Road.

The Albees had four children, two of whom died young. A surviving daughter was named Louise, in honor of Harriet's good friend, Louise Shaw. Both Louises were affectionately known as Loulie, a name which seemed to please Harriet almost as did the child herself. Louise Shaw and her brother, Robert Gould Shaw, who led the famed Massachusetts 54th Infantry Regiment of black soldiers in the Civil War, had been among Harriet's earliest and most devoted supporters.

As time went on Harriet herself became increasingly weakened by tuberculosis. A recuperative journey to the Bahamas did little good and she yearned to return to the beauty of New Hampshire. The Channing Home called her too, for she had remained deeply involved with its operation.

She spent the final months of her life as a patient in the home she had created. James de Normandie, minister of the First Church, Roxbury, was one of many who visited her there. De Normandie, a Unitarian, was one of Harriet's warmest admirers and later wrote a brief biography that contains many of her own reminiscences.

In fulfillment of his pastoral duties, de Normandie warned Harriet that she

could never expect to see her husband in the next world. The failing but still alert woman had a ready reply. "Oh, I know there is some little corner door by which you Unitarians will get in."

Harriet Ryan Albee died at the Channing Home, on May 2, 1873, and was buried in New Hampshire. Shortly before her death she wrote a letter to the friends of the Channing Home, thanking them for believing in her and for helping her to make the home a success. She urged them to make few changes and to remember Dr. James Jackson's early advice not to let the home be "spoiled by ambitious plans."

In 1907 the Channing Home was relocated to Pilgrim Road, opposite the New England Deaconess Hospital, where it remained for another 50 years. During that half-century, it attained national stature as a treatment center for tubercular patients. The staff contained many physicians and surgeons whose professional ability and devotion to Harriet Ryan Albee's principles of gentle care made the Channing Home a continuing haven for the sick. No one was more assiduous in his efforts to perpetuate Harriet Ryan Albee's memory than Theodore Badger, the last chief of staff at the home and a much beloved physician.

By 1958, improved sanitation, anti-

tuberculous drugs, and other therapeutic measures had greatly decreased the incidence of tuberculosis. Harriet Ryan Albee had been pleased that, in her time, "the home (had) never done good by rule, but according to a present need." Hence it was fitting that the home should have been closed and the funds transferred to HMS where they were used to help establish the Channing Laboratory and the William Ellery Channing Professorship of Medicine.

Finally, in the summer of 1987, exactly 130 years after the doors of the Channing Home were first opened to receive destitute, chronically ill women, the Harriet Ryan Albee Professorship of Medicine was established at HMS. It honored the memory of a woman who, with little fanfare but much spirit, had accomplished more than anyone then realized. □

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